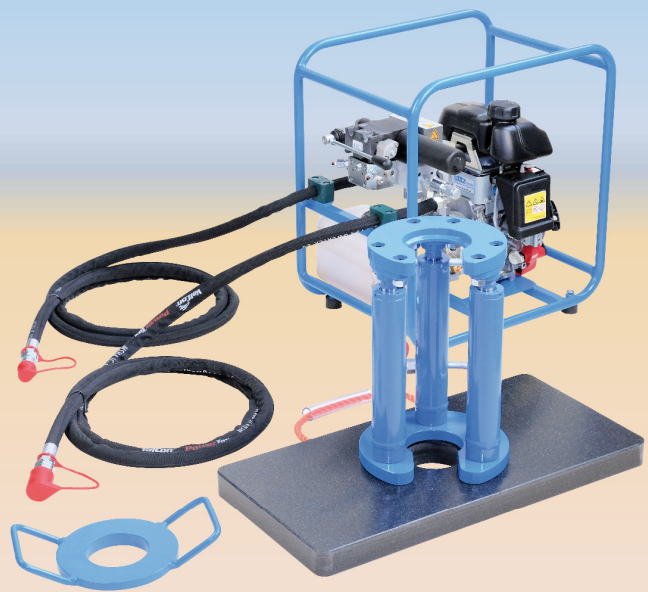
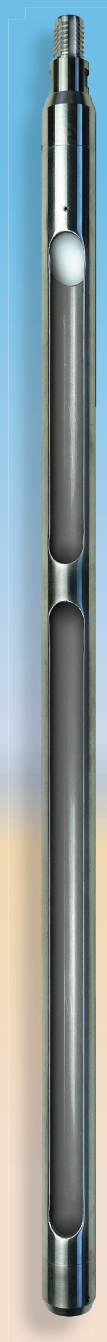


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**Catalogue 2024**

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Version 02/24

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## Window sampler RDS connection

A successful concept optimised by the new RDS connection. The RDS connection allows the transfer of higher forces compared to conventional connection types. The connection is characterized by easier handling during screwing and loosening. Loosening and retightening of conventional threaded nipples is no longer necessary.

- Screw-on cutting edge in smooth or reinforced version
- Interchangeable head pieces with wrench flat AF 30
- Holes for steel core catcher
- Length 1000 mm: 1 bridge; length 2000 mm: 2 bridges
- Length 3000, 4000 mm: every 500 mm bridge
- Extension rods can be used for „Direct Push (DP)“-Procedure

Art.-No.	€/piece	Ø (mm)	Sample length (mm)	Cutting edge Ø (mm)	Thread
Window sampler with smooth cutting edge					
18.232	340,00	80	500	80	RDS
18.200	231,00	36	1000	36	RDS
18.201	247,60	40	1000	40	RDS
18.202	255,30	50	1000	50	RDS
18.203	297,80	60	1000	60	RDS
18.214	300,60	70	1000	71	RDS
18.204	350,80	80	1000	80	RDS
18.210	294,80	36	2000	36	RDS
18.211	308,80	40	2000	40	RDS
18.212	328,00	50	2000	50	RDS
18.213	388,70	60	2000	60	RDS
18.219	399,00	70	2000	71	RDS
18.220	463,60	36	3000	36	RDS
18.221	476,30	40	3000	40	RDS
18.225	507,00	36	4000	36	RDS
18.226	521,10	40	4000	40	RDS
Window sampler with reinforced cutting edge					
18.233	346,10	80	500	83	RDS
18.205	234,80	36	1000	39	RDS
18.206	251,40	40	1000	43	RDS
18.207	259,00	50	1000	53	RDS
18.208	301,50	60	1000	63	RDS
18.209	356,90	80	1000	83	RDS
18.215	298,60	36	2000	39	RDS
18.216	312,80	40	2000	43	RDS
18.217	331,80	50	2000	53	RDS
18.218	392,40	60	2000	63	RDS
18.222	466,10	36	3000	39	RDS
18.223	480,10	40	3000	43	RDS
18.227	510,70	36	4000	39	RDS
18.228	524,90	40	4000	43	RDS



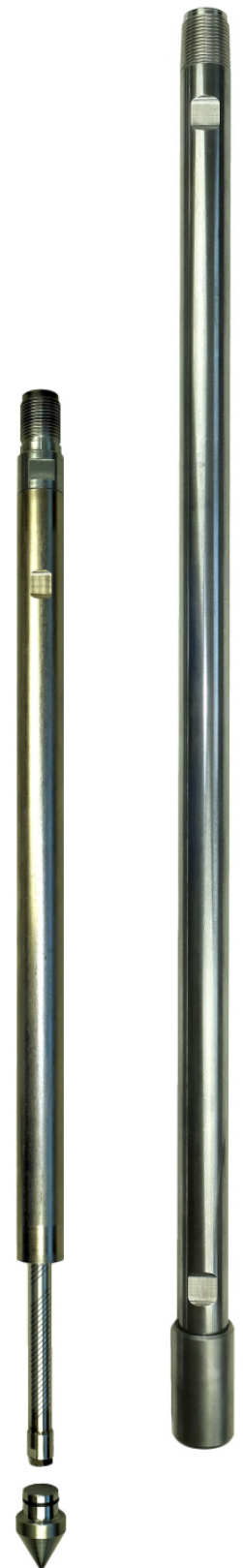
## Water sampler DP 36/48 - RDS connection

This water sampler is available with external or internal filter system. Differences to the water sampler DP 32/42 are the larger sized probing rod and RDS connection.

Both water sampling and soil sampling can be performed using RDS connection and associated probing equipment. One probing rod can be used for both applications.

- High stability
- RDS connection
- Field proven filter system
- One probing rod for two applications

Art.-No	€/piece	Description
<b>28.632</b>	265,00	<b>Water sampler DP 36/48 - external filter</b> Consisting of:
<b>28.761</b>	o. d.	Steel cone
<b>28.762</b>	o. d.	External filter
<b>28.763</b>	o. d.	Filter tube
<b>28.626</b>	o. d.	Connector RDS
<b>28.631</b>	670,50	<b>Water sampler DP 36/48 - internal filter</b> Consisting of:
<b>28.606</b>	o. d.	Lost steel cone, with O-ring
<b>28.604</b>	o. d.	Holding tube for internal filter
<b>28.607</b>	o. d.	Guide socket
<b>28.615</b>	o. d.	Extendable internal filter, consisting of:
28.616	o. d.	- Locking screw
28.617	o. d.	- Internal filter with piston and o-ring
<b>28.629</b>	o. d.	Connector RDS
<b>Accessories</b>		
<b>28.251</b>	24,00	Foot valve pump SL-AD 11/9 mm
<b>28.783</b>	54,10	PE hose Ø 10x1 mm, 100 m
<b>29.141</b>	594,80	Peristaltic pump SL-18 / Ø 10 mm
<b>29.110</b>	o. d.	Adapter SL - DP 36/48
<b>28.769</b>	o. d.	Ejection rod
<b>28.768</b>	o. d.	Inner extension
<b>18.250</b>	115,50	Hollow extension rod RDS Ø 36/48x1000 mm
<b>10.115</b>	485,60	Ball clamp for Ø 36-53 mm



## Window sampler GS connection

Used for taking soil samples at contaminated sites. Our improved in-house GS connection provides easy handling when screwing and loosening the window samplers and extension rods. When in use, it provides more efficiency. The loosening and retightening of conventional threaded nipples is not necessary.

- Screw-on cutting edge in smooth or reinforced version
- Interchangeable head pieces wrench flat AF 30
- Holes for steel core catcher
- Length 1000 mm: 1 bridge; length 2000 mm: 2 bridges
- Length 3000, 4000 mm: every 500 mm bridge

Art.-No.	€/piece	Ø (mm)	Sample length (mm)	Cutting edge Ø (mm)	Thread
Window sampler with smooth cutting edge					
17.627	333,60	80	500	80	GS
17.620	218,60	36	1000	36	GS
17.411	235,10	40	1000	40	GS
17.622	242,80	50	1000	50	GS
17.624	285,20	60	1000	60	GS
16.034	288,10	70	1000	71	GS
17.626	344,40	80	1000	80	GS
17.640	282,30	36	2000	36	GS
17.413	296,40	40	2000	40	GS
17.642	315,50	50	2000	50	GS
17.644	375,90	60	2000	60	GS
16.031	386,50	70	2000	71	GS
17.822	451,10	36	3000	36	GS
17.862	463,80	40	3000	40	GS
17.832	494,40	36	4000	36	GS
17.868	508,40	40	4000	40	GS
Window sampler with reinforced cutting edge					
17.389	337,50	80	500	83	GS
17.380	222,30	36	1000	39	GS
17.410	238,80	40	1000	43	GS
17.384	246,50	50	1000	53	GS
17.386	288,90	60	1000	63	GS
17.388	348,30	80	1000	83	GS
17.390	286,10	36	2000	39	GS
17.412	300,10	40	2000	43	GS
17.394	319,30	50	2000	53	GS
17.396	379,70	60	2000	63	GS
17.842	454,80	36	3000	39	GS
17.865	467,60	40	3000	43	GS
17.852	498,10	36	4000	39	GS
17.871	512,30	40	4000	43	GS



## Window sampler M22 connection

For taking soil samples at contaminated sites. Used to investigate soil contamination, soil size distribution, general soil classification and profile description.

- Screw-on cutting edge in smooth or reinforced version
- Interchangeable head pieces with wrench flat AF 30
- Holes for steel core catcher
- Length 1000 mm: 1 bridge; length 2000 mm: 2 bridges
- Length 3000, 4000 mm: every 500 mm bridge
- Incl. **threaded nipple M22x70 mm - AF 15**



Art.-No.	€/piece	Ø (mm)	Sample length (mm)	Cutting edge Ø (mm)	Thread
Window sampler with smooth cutting edge					
16.760	337,50	80	500	80	M22
16.710	222,30	36	1000	36	M22
16.712	238,80	40	1000	40	M22
16.714	246,50	50	1000	50	M22
16.716	288,90	60	1000	60	M22
16.719	291,80	70	1000	71	M22
16.718	348,30	80	1000	80	M22
16.730	286,10	36	2000	36	M22
16.732	300,10	40	2000	40	M22
16.734	319,30	50	2000	50	M22
16.736	379,70	60	2000	60	M22
16.737	390,30	70	2000	71	M22
16.740	454,80	36	3000	36	M22
16.741	467,60	40	3000	40	M22
16.745	498,10	36	4000	36	M22
16.746	512,30	40	4000	40	M22
Window sampler with reinforced cutting edge					
16.761	341,30	80	500	83	M22
16.700	226,20	36	1000	39	M22
16.702	242,60	40	1000	43	M22
16.704	250,20	50	1000	53	M22
16.706	292,60	60	1000	63	M22
16.708	352,10	80	1000	83	M22
16.720	289,90	36	2000	39	M22
16.722	303,80	40	2000	43	M22
16.724	323,10	50	2000	53	M22
16.726	383,50	60	2000	63	M22
16.750	458,40	36	3000	39	M22
16.751	471,30	40	3000	43	M22
16.755	501,90	36	4000	39	M22
16.756	516,10	40	4000	43	M22

## Window sampler M20 connection

For taking soil samples at contaminated sites. Used to investigate soil contamination, soil size distribution, general soil classification and profile description.

- Screw-on cutting edge in smooth or reinforced version
- Interchangeable head pieces with wrench flat AF 30
- Holes for steel core catcher
- Length 1000 mm: 1 bridge; length 2000 mm: 2 bridges
- Length 3000, 4000 mm: every 500 mm bridge
- Incl. **threaded nipple M20x70 mm - AF 13**

Art.-No.	€/piece	Ø (mm)	Sample length (mm)	Cutting edge Ø (mm)	Thread
Window sampler with smooth cutting edge					
17.890	333,60	80	500	80	M20
16.002	218,60	36	1000	36	M20
17.401	235,10	40	1000	40	M20
16.004	242,80	50	1000	50	M20
16.006	285,20	60	1000	60	M20
16.027	288,10	70	1000	71	M20
16.008	344,40	80	1000	80	M20
16.003	282,30	36	2000	36	M20
17.403	296,40	40	2000	40	M20
16.005	315,50	50	2000	50	M20
16.007	375,90	60	2000	60	M20
16.029	386,50	70	2000	71	M20
17.820	451,10	36	3000	36	M20
17.860	463,80	40	3000	40	M20
17.830	494,40	36	4000	36	M20
17.866	508,40	40	4000	40	M20
Window sampler with reinforced cutting edge					
17.891	337,50	80	500	83	M20
17.340	222,30	36	1000	39	M20
17.400	238,80	40	1000	43	M20
17.344	246,50	50	1000	53	M20
17.346	288,90	60	1000	63	M20
17.348	348,30	80	1000	83	M20
17.350	286,10	36	2000	39	M20
17.402	300,10	40	2000	43	M20
17.354	319,30	50	2000	53	M20
17.356	379,70	60	2000	63	M20
17.840	454,80	36	3000	39	M20
17.863	467,60	40	3000	43	M20
17.850	498,10	36	4000	39	M20
17.869	512,30	40	4000	43	M20





## Window sampler Ø 63 mm with inner liner

Closed window sampler with PVC sample tubes are used for taking relatively undisturbed soil samples at contaminated sites.

- Inner liner system
- Sediment core Ø 46 mm
- Closed rod version
- Screw-on probe head
- Screw-on cutting edge
- Weight 1000 mm ca. 12,8 kg
- Incl. inner PVC liner and attachment ring
- Incl. wrench flat AF 60 and drilling at cutting edge
- Incl. headpiece



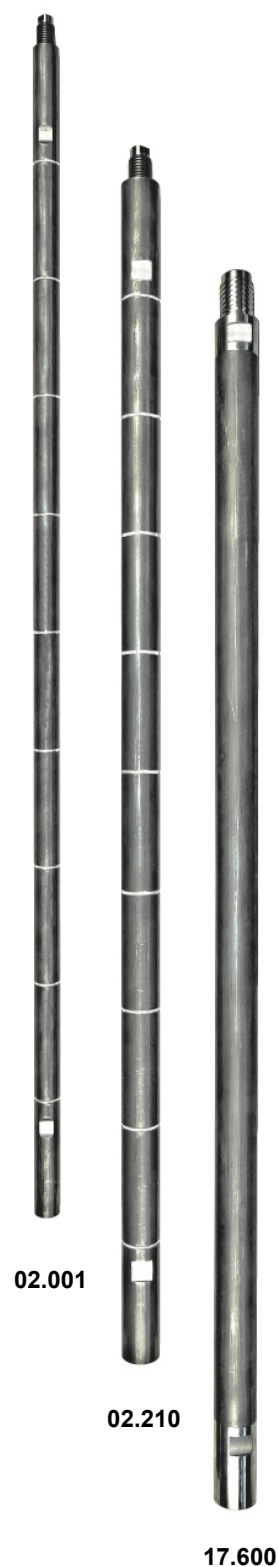
Art.-No.	€/piece	Ø (mm)	Sample length (mm)	Inner liner Ø (mm)	Thread
Window sampler with inner liner					
17.501	681,30	63	1000	50	M20
17.504	681,30	63	1000	50	M22
17.518	686,80	63	1000	50	GS
17.528	686,80	63	1000	50	RDS
Accessories					
17.521	o. d.	Probe head K-M20 IG			
17.522	o. d.	Probe head K-M22 IG			
17.523	o. d.	Probe head K-GS AG			
17.524	o. d.	Probe head K-RDS AG			
17.509	o. d.	Screwable cutting edge			
17.510	o. d.	PE core catcher ring			
17.512	o. d.	Inner liner attachment ring			
13.060	o. d.	Cap for inner liner Ø 50 mm			
17.514	o. d.	Inner PVC liner 50x1000 mm, transparent			
04.017	o. d.	Hook spanner 58-62 mm			
04.039	o. d.	Construction wrench AF 60			
10.119	o. d.	Ball clamp for 60-67 mm			

## Extension rods

Hollow and solid rods are needed to extend window samplers and notched rods. Furthermore, they are used for soil sampling according to DIN EN ISO 22476-2.

- Quenched and tempered steel
- Solid rod version available
- Extra lightweight hollow rod design
- Extra lightweight design with head pieces
- High stability
- Field proven

Art.-No.	€/piece	Ø (mm)	Length (mm)	dm marks	AF (mm)	Weight (kg)	Thread
Solid rods							
02.012	49,70	25	1000	-	21	3,9	M16
02.004	63,50	32	1000	exists	27	6,3	M20
17.605	75,60	36	1000	-	30	8,0	GS
Hollow rods							
02.001	45,90	22	1000	exists	19	2,2	M16
02.210	66,20	32	1000	exists	27	4,7	M20
02.245	73,40	36	1000	-	30	6,2	M20
02.244	76,70	36	1000	-	30	6,2	M22x70
18.250	115,50	36/48	1000	-	30	6,6	RDS
02.422	135,50	36	2000	-	30	12,4	M22x70
Hollow rods with head pieces							
17.600	91,90	36	1000	-	30	5,1	GS
17.601	148,90	36	2000	-	30	9,5	GS



## Threaded nipple

For connecting extension rods and window samplers.

- Quenched and tempered steel
- Field proven

Art.-No.	€/piece	Dimension (mm)	AF (mm)
03.010	7,70	M16x60	11
03.011	8,30	M20x70	13
03.013	10,80	M22x70	15



## Steel core catcher

Used in window samplers to retain the sample in the rod.

Art.-No.	€/piece	Window sampler Ø (mm)
16.100	12,20	36 / 40
16.101	14,90	50 / 60
16.102	17,50	70 / 80



## Cutting edge

Interchangeable screwable cutting edges. Used for window samplers.

Art.-No.	€/piece	Window sampler Ø (mm)	External-Ø (mm)
Smooth cutting edge			
16.041	39,70	36	36
16.110	43,60	40	40
16.043	46,00	50	50
16.044	49,90	60	60
16.047	57,40	70	71
16.045	61,40	80	80
Reinforced cutting edge			
16.051	45,40	36	39
16.111	49,20	40	43
16.053	51,60	50	53
16.054	55,50	60	63
16.055	68,00	80	83



## Head pieces for window samplers

Head pieces allow a quick replacement of the threaded connection of window samplers.

- New K-thread connection

Art.-No.	€/piece	Thread	Ø (mm)	AF (mm)
K-thread version				
17.750	45,80	K-GS AG	36	30
17.751	37,00	K-M20 IG	36	30
17.752	37,00	K-M22 IG	36	30
18.240	45,50	K-RDS AG	36	30



## Thread adapter

To adapt other thread connections.

Art.-No.	€/piece	Thread	Ø (mm)	AF (mm)
18.243	45,30	RDS AG - M20 IG	36	30
18.244	45,30	RDS AG - M22 IG	36	30
18.245	45,30	RDS AG - GS IG	36	30
17.673	44,60	GS IG - M20 IG	36	30
17.672	44,60	GS IG - M22 IG	36	30
17.660	35,50	GS AG - M20 IG	36	30
17.662	35,50	GS AG - M22 IG	36	30
03.005	34,90	M16 IG - M20 IG	32	27
03.009	34,90	M16 IG - M22 IG	36	30
03.007	35,50	M20 IG - M22 IG	36	30
07.007	34,40	Hex 22 mm - M16 IG	Hex 22 mm	-
07.015	55,00	Hex 22 mm - M16 IG	28	-
07.016	55,00	Hex 22 mm - M20 IG	32	-
Thread adapter riding				
07.063	o. d.	Adapter riding M20 IG		
07.064	o. d.	Adapter riding M22 IG		
07.065	o. d.	Adapter riding GS IG		
07.066	o. d.	Adapter riding RDS IG		



6 kt. 22 mm



Adapter reitend

## Striking head

Striking heads are screwed on notched rods and extension rods.

- Cross hole for handle
- Suitable for pulling device S-9000, S-9003

Art.-No.	€/piece	Internal thread	Cross hole Ø (mm)
<b>05.005</b>	39,60	<b>M16</b>	<b>16</b>
<b>05.002</b>	46,30	<b>M20</b>	<b>16</b>



## Rotary handle

For turning, pulling and cleaning of hand drills.

Art.-No.	€/piece	Length (mm)	Scraper-Ø (mm)
Steel-version, rubber coating			
<b>06.004</b>	38,30	<b>260</b>	<b>12</b>
<b>06.001</b>	40,40	<b>325</b>	<b>16</b>
<b>06.002</b>	43,10	<b>525</b>	<b>16</b>



## Hook spanner

For loosening of cutting edges and striking heads.

Art.-No.	€/piece	Size (mm)	Plugin Ø (mm)
<b>04.015</b>	12,90	<b>34 - 36</b>	<b>4</b>
<b>04.019</b>	13,50	<b>40 - 42</b>	<b>4</b>
<b>04.011</b>	15,60	<b>45 - 50</b>	<b>5</b>
<b>04.017</b>	21,10	<b>58 - 62</b>	<b>5</b>
<b>04.020</b>	22,20	<b>68 - 75</b>	<b>5</b>
<b>04.018</b>	23,70	<b>80 - 90</b>	<b>6</b>



## Construction wrench

Art.-No.	€/piece	AF (mm)	Length (mm)	Extension rods Ø (mm)
Construction wrench				
<b>04.080</b>	15,60	<b>11</b>	<b>200</b>	-
<b>04.081</b>	16,80	<b>13</b>	<b>225</b>	-
<b>04.088</b>	18,90	<b>15</b>	<b>250</b>	-
<b>04.082</b>	25,90	<b>19</b>	<b>310</b>	<b>22</b>
<b>04.083</b>	28,40	<b>21</b>	<b>340</b>	<b>25</b>
<b>04.084</b>	29,90	<b>24</b>	<b>400</b>	<b>28</b>
<b>04.085</b>	32,00	<b>27</b>	<b>450</b>	<b>32</b>
<b>04.086</b>	42,50	<b>30</b>	<b>480</b>	<b>36</b>
Construction wrench, extra long				
<b>04.070</b>	56,30	<b>19</b>	<b>400</b>	<b>22</b>
<b>04.073</b>	62,70	<b>27</b>	<b>550</b>	<b>32</b>
<b>04.074</b>	67,10	<b>30</b>	<b>550</b>	<b>36</b>
<b>04.075</b>	67,10	<b>32</b>	<b>550</b>	<b>36</b>



## Round brush

Used to clean internal threads.

Art.-No.	€/piece	Round brush for internal thread
04.100	10,50	M16
04.101	10,50	M20 - M22
04.102	10,50	GS - RDS



## Curved spatula

Used for sampling and cleaning of window samplers.

Art.-No.	€/piece	Description
29.210	28,90	Curved spatula, width 20 mm



## Screwlock

Used to glue threaded nipples, shafts and sockets. Creates solid connections and prevents twisting.

Art.-No.	€/piece	Description
18.000	28,00	Screwlock, 50 ml



## Rack for window sampler

A functional storage option for window sampler, extension rods, breaker hammers and tools.

- Foldable
- Incl. storage shelf
- Dimensions unfolded (LxHxB): 730x1005x800 mm
- Weight: ca. 15 kg

Art.-No.	€/piece	Description
17.530	o. d.	Rack for window sampler



## Diamond drill

The diamond drill is suitable to drill normal and reinforced concrete and all common building materials.

- Easy cutting
- External hex
- AF 41 mm
- Connection thread IG 1 1/4" UNC
- Laser welded segments



Art.-Nr.	€/piece	Diameter (mm)	Working length (mm)	Thread
28.480	75,80	62	450	1 1/4"
28.481	95,80	82	450	1 1/4"
28.482	111,40	102	450	1 1/4"
28.486	186,60	152	450	1 1/4"

## Sand gauge according to DIN EN ISO 14688-1

A **handy** display for quickly and reliably **adressing mineral soil types**. It facilitates the **preparation of standardized stratigraphic logs** at the drilling site and should not be missing from any **qualified** drilling crew.

The grain groups shown, from **silt** to **sand** to **gravel** correspond to the grain size ranges according to DIN EN ISO 14688-1.

- Lightweight and handy
- Grain sizes according to DIN EN ISO 14688-1



Art.-No.	€/piece	Description
06.003	o. d.	Sand gauge

## Notched rod

Notched rods are used at contaminated sites to gain small sample quantities of soil.

- Half-open, durable conical cone
- Extremely stable in shape
- Field proven
- Incl. threaded nipple

Art.-No.	€/piece	Ø (mm)	Sample length (mm)	AF (mm)	Weight (kg)	Thread
<b>01.001</b>	140,60	<b>22</b>	<b>1000</b>	<b>19</b>	<b>2,3</b>	<b>M16</b>
<b>01.003</b>	141,60	<b>25</b>	<b>1000</b>	<b>21</b>	<b>2,8</b>	<b>M16</b>
<b>01.005</b>	168,30	<b>28</b>	<b>1000</b>	<b>24</b>	<b>3,6</b>	<b>M16</b>
<b>01.007</b>	174,30	<b>32</b>	<b>1000</b>	<b>27</b>	<b>4,5</b>	<b>M20</b>
<b>01.002</b>	264,80	<b>22</b>	<b>2000</b>	<b>19</b>	<b>4,1</b>	<b>M16</b>
<b>01.004</b>	267,60	<b>25</b>	<b>2000</b>	<b>21</b>	<b>5,0</b>	<b>M16</b>
Accessories						
<b>05.005</b>	39,60	Striking head M16				
<b>05.002</b>	46,30	Striking head M20				
<b>06.001</b>	40,40	Rotary handle				



01.005

## Pipe drill

Pipe drills are used for taking soil samples.

- Open, quenched and tempered cone
- Extra bridge at cone area
- With connection thread
- High stability
- Incl. threaded nipple

Art.-No.	€/piece	Ø (mm)	Sample length (mm)	AF (mm)	Weight (kg)	Thread
<b>01.114</b>	296,70	<b>32</b>	<b>2000</b>	<b>27</b>	<b>5,5</b>	<b>M20</b>



## Soil sample ring

They are used for taking undisturbed soil samples at the surface or in bore-holes. They are very well suited for laboratory tests.

- Sample volume 868 cm<sup>3</sup>
- Galvanized precision steel tube
- Good price / performance ratio
- Incl. two closing caps

Art.-No	€/piece	Description
12.001	24,40	Soil sample ring Ø 100x2x120 mm

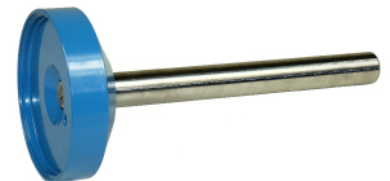


## Hammering head

The hammering head is used to drive in the soil sample rings.

- With guide zone
- Sturdy, impact resistant handle

Art.-No	€/piece	Description
16.196	88,10	Hammering head for sample ring Ø 100 mm



## Case - Set

- Plastic transport case for soil sample rings
- Incl. closing caps

Art.-No	€/piece	Description
16.402	346,10	Case - Set, 12 pcs. sample rings Ø 100x2x120 mm



## Hand drill - Set 2020

Multi-part expandable set for taking soil samples.

Thanks to the extendable hand drill, samples can be taken from depths below 100 cm.

### Consisting of:

- Extendable hand drill
  - Groove length 1000 mm
  - Groove 18 mm
  - Total length ca. 1150 mm
  - Ca. 600 mm tapered
  - dm-marks
  - Incl. threaded nipple M16
- Screwable striking head
  - Cross hole for pulling device
  - Thread type M16
- Rubber coated rotary handle 325 mm
  - Pluggable
  - Sharpened to clean the groove
- Extension rod Ø 22 x 1000 mm - M16
- STITZ mallet
  - Low recoil handle
  - Hitting surface Ø 120 mm
  - Weight ca. 3,0 kg
- Pulling device S-9000
  - Lifting capacity max. 550 kg
  - Stepless lifting mechanism
  - Lifting height 1000 mm
  - Weight ca. 5,8 kg
- Roundbrush for internal thread M16
- Set of wrenches



Art.-No	€/piece	Description
<b>08.100</b>	749,10	<b>Hand drill - Set 2020</b> consisting of:
<b>08.026</b>	o. d.	Extendable hand drill Ø 28 x 1000 mm - M16, conical
<b>06.001</b>	o. d.	Rotary handle 325 mm
<b>05.005</b>	o. d.	Striking head with cross hole - M16
<b>02.001</b>	o. d.	Hollow extension rod Ø 22 x 1000 mm - M16
<b>04.080</b>	o. d.	Construction wrench AF 11
<b>04.082</b>	o. d.	Construction wrench AF 19
<b>04.084</b>	o. d.	Construction wrench AF 24
<b>04.100</b>	o. d.	Roundbrush for internal thread M16
<b>09.045</b>	o. d.	Mallet weight ca. 3.0 kg, Ø 120 mm
<b>10.041</b>	o. d.	Pulling device S-9000
Accessories		
<b>08.050</b>	o. d.	Bag for field devices, Ø 150 x 1200 mm
<b>04.008</b>	o. d.	Replacement drill Ø 70 mm
<b>04.029</b>	o. d.	Replacement drill Ø 80 mm
<b>24.000</b>	o. d.	Soil probe S-41079



Bag for field devices

## Hand drill-Caddy SB-2300

The SB-2300 hand drill caddy facilitates the transport of hand drills, mallets and pulling device thanks to various storage spaces.

Samples can be taken on site and transported separately inside of the 3 buckets.



### Consisting of:

- Hand drill-Caddy SB-2300
- 3 pcs. plastic bucket 5,6 liters with lid
- 1 pc. transport box with lid

### Technical data:

- Max. load capacity: 65 kg
- Dimensions (LxWxH):  
750x630x1040 mm
- Weight ca.: 16,8 kg

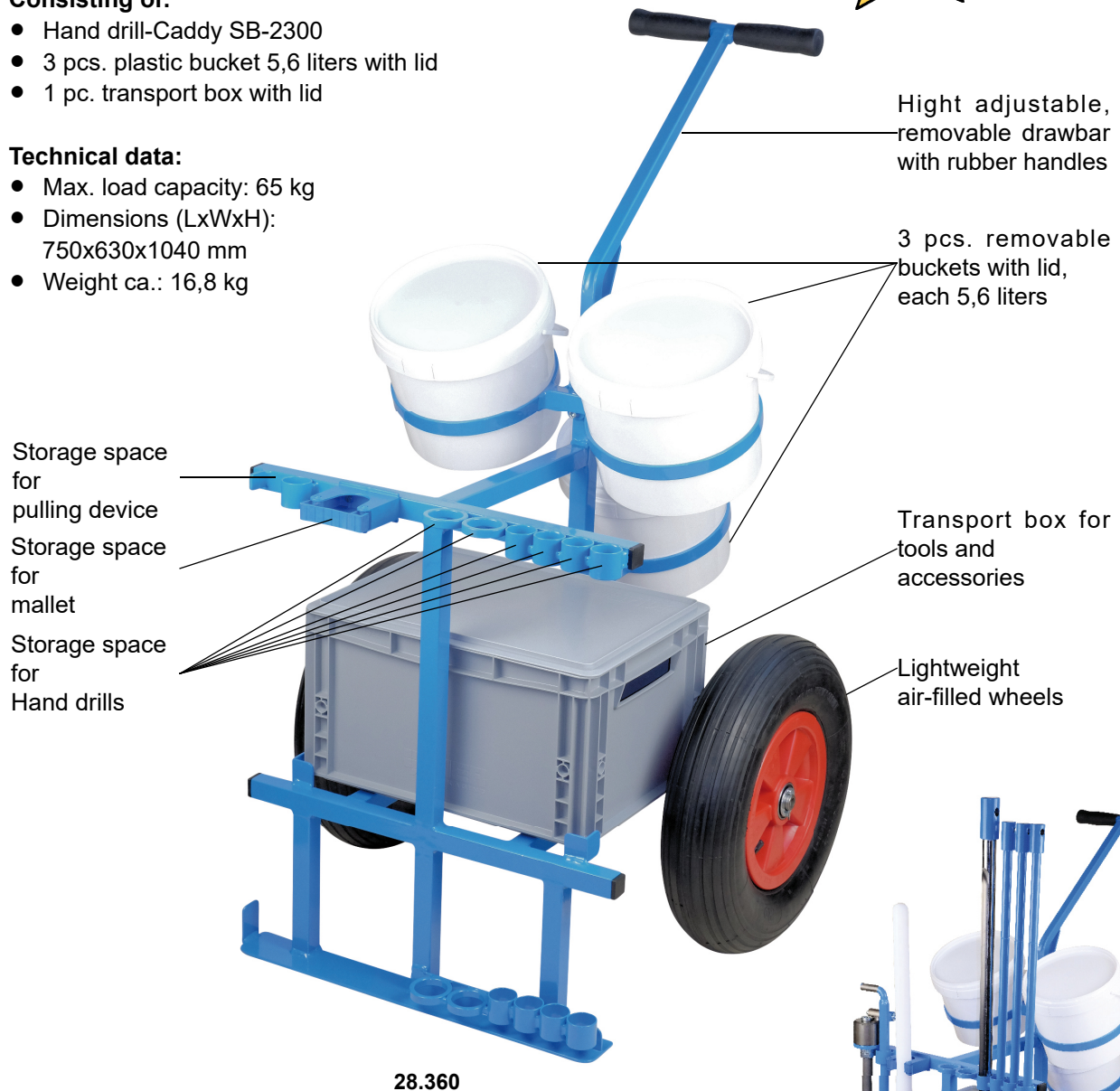


Fig. hand drills, mallet and pulling device are **not included** in the scope of delivery.

Art.-No	€/piece	Description
<b>28.360</b>	o. d.	<b>Hand drill-Caddy SB-2300</b>
Accessories		
<b>8775</b>	o. d.	Bucket 5,6 liters with lid
<b>09.045</b>	o. d.	Mallet weight ca. 3.0 kg, Ø 120 mm
<b>10.052</b>	o. d.	Pulling device S-9003
<b>08.004</b>	o. d.	Hand drill Ø 28 x 1000 mm - conical
<b>28.370</b>	o. d.	Drilling set S-10
<b>28.340</b>	o. d.	Drilling set S-30

## Hand drills 90 cm

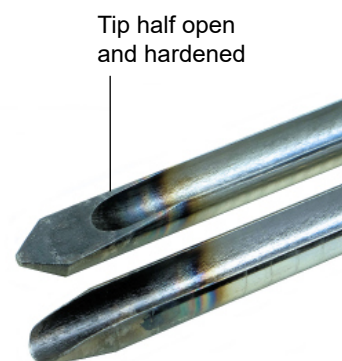
These hand drills are used to take largely undisturbed soil samples up to 90 cm depth and are widely used in soil mapping and soil nutrient content studies.

- Hardened conical cone
  - Depth marks at 30, 60 and 90 cm
  - Solid, reinforced striking head Ø 36 mm
  - Incl. rubber coated handle, pluggable and sharpened, which simultaneously serves to clean the groove
  - High stability, lightweight and handy design
- 
- Hand drill 08.029 with half-open, hardened cone, highly suitable for stony soils



08.025

Art.-No	€/piece	External-Ø (mm)	Groove (mm)	Groove length (mm)	Total length (mm)	Weight (kg)
Incl. rotary handle						
<b>08.025</b>	203,00	<b>22</b>	<b>14</b>	<b>900</b>	<b>1100</b>	<b>3,0</b>
<b>08.029</b>	209,20	<b>22</b>	<b>14</b>	<b>900</b>	<b>1100</b>	<b>3,1</b>
Accessories						
<b>50.510</b>	35,90	Rotary handle				
<b>09.045</b>	116,70	Mallet, length 850 mm, weight 3,0 kg				
<b>09.002</b>	126,80	Mallet, length 800 mm, weight 3,1 kg				



## Hand drills 100 cm

These hand drills are used to take largely undisturbed soil samples up to 90 cm depth and are driven into the ground with a mallet. Due to the length of the samples taken, they are often used for soil mapping and nutrient content studies of soils.

- Hardened conical cone
  - Depth marks every 100 mm
  - Solid, reinforced striking head Ø 38 mm
  - Incl. rubber coated handle, pluggable and sharpened, which simultaneously serves to clean the groove
  - High stability, lightweight and handy design
  - Fast and easy to use
- Hand drill 08.030, cylindrical version  
external-Ø: 28 mm, groove 18 mm, for stony soils
  - Hand drill 08.004, cylindrical version  
tapered to ca. 600 mm length  
external-Ø top/bottom: Ø 28/24 mm  
used for heavy, clay-containing, compacted soils
  - Hand drill 08.005, cylindrical extendable version  
tapered to ca. 600 mm length  
external-Ø top/bottom: Ø 28/24 mm  
used for heavy, clay-containing, compacted soils



08.004

Art.-No	€/piece	External-Ø (mm)	Groove (mm)	Groove length (mm)	Total length (mm)	Weight (kg)
Fixed striking head						
<b>08.030</b>	212,90	<b>28</b>	<b>18</b>	<b>1000</b>	<b>1170</b>	<b>4,2</b>
<b>08.004</b>	231,60	<b>28</b>	<b>18</b>	<b>1000</b>	<b>1170</b>	<b>4,1</b>
Screwable striking head, thread M16						
<b>08.005</b>	256,80	<b>28</b>	<b>18</b>	<b>1000</b>	<b>1200</b>	<b>4,1</b>
Accessories						
<b>06.001</b>	40,40	Rotary handle				
<b>05.005</b>	39,60	Striking head with cross hole, M16				
<b>02.001</b>	45,90	Hollow extension rod Ø 22x1000 mm				
<b>09.045</b>	116,70	Mallet, length 850 mm, weight 3,0 kg				
<b>09.005</b>	170,00	Mallet, length 950 mm, weight 4,0 kg				

## Drilling set S-10

These hand drills are used for taking largely undisturbed soil samples up to 90 cm depth. They are particularly often used for soil sampling in nutrient studies. The three shovels have matching diameters and minimize friction forces during sampling.

- Screwable shovels, connection thread M12
- Incl. rubber coated rotary handle, pluggable and sharpened, which simultaneously serves to clean the groove
- Exact separation of the 3 layers in nutrient samples
- High stability, lightweight and handy

Art.-No	€/piece	Description	Sample size ca. (g)	Depth max. (mm)
Sample length 300 mm				
<b>28.370</b>	401,40	<b>Drilling set S-10</b> Consisting of:		
<b>28.373</b>	o. d.	Drilling rod Ø 22 mm	120	900
<b>28.372</b>	o. d.	Drilling rod Ø 20 mm	90	900
<b>28.371</b>	o. d.	Drilling rod Ø 18 mm	70	900
<b>06.004</b>	38,30	Rotary handle 260 mm	-	-
Replacement shovel incl. threaded nipple				
<b>02.026</b>	o. d.	Shovel Ø 18x300 mm		
<b>02.027</b>	o. d.	Shovel Ø 20x300 mm		
<b>02.028</b>	o. d.	Shovel Ø 22x300 mm		

## Drilling set S-30

These drills are characterized by a thick-walled shovel. They are used for stony, frozen, compacted and dry soils.

- Screw-on shovels, connection thread M16
- Three diameter-matched shovels
- Incl. rubber coated rotary handle, pluggable and sharpened, which simultaneously serves to clean the groove
- Extremely robust shovel design, field proven

Art.-No	€/piece	Description	Sample size ca. (g)	Depth max. (mm)
Sample length 300 mm				
<b>28.340</b>	523,50	<b>Drilling set S-30</b> Consisting of:		
<b>28.341</b>	o. d.	Drilling rod Ø 36 mm	330	600
<b>28.342</b>	o. d.	Drilling rod Ø 32 mm	250	600
<b>28.343</b>	o. d.	Drilling rod Ø 28 mm	200	900
<b>06.001</b>	40,40	Rotary handle 325 mm	-	-
Replacement shovel S-30 incl. thread nipple				
<b>28.345</b>	o. d.	Shovel Ø 28x300 mm		
<b>28.346</b>	o. d.	Shovel Ø 32x300 mm		
<b>28.347</b>	o. d.	Shovel Ø 36x300 mm		



28.370



28.340

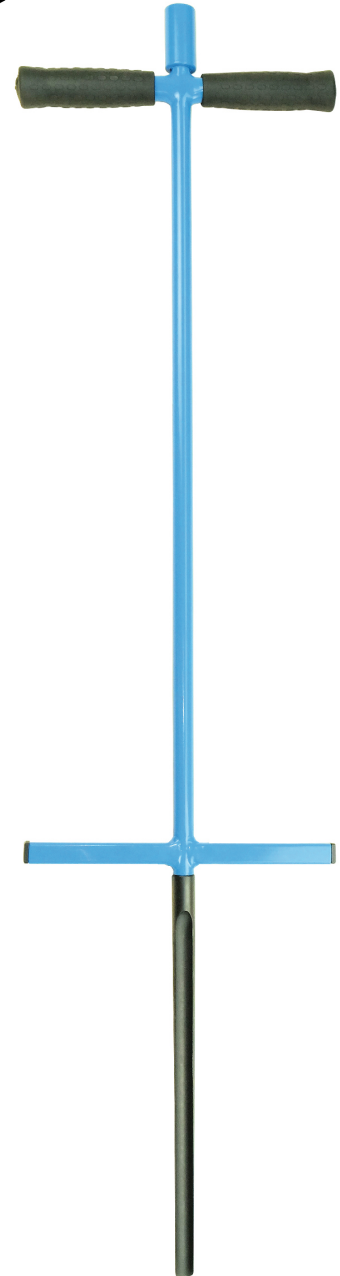
## Hand drill SK

The **optimized** hand drill, is suitable for soil sampling from **light, medium and heavy soils**.

The **rubber handles** provide a **firm grip** for the hands.  
**Comfortable treads** make piercing the soil much easier.

With **revised grooved shovel** type for optimized operation.  
The hand drill is also suitable for hammering in with a mallet.

- Steel impact head
- Rubber handles
- Protective coating
- Hardened tip
- High stability, light & handy
- Comfortable steps on both sides
- Replaceable shovel with thread connection
- Sampling up to 300 mm depth, optionally extendable up to 600 mm depth
- Hand drill SK 02.041 and 02.046, conical grooved shovel for easier sampling



02.041

Art.-No	€/piece	External-Ø (mm)	Groove (mm)	Groove length (mm)	Total length (mm)	Weight (kg)
<b>02.046</b>	215,10	<b>18</b>	<b>12</b>	<b>300</b>	<b>1130</b>	<b>2,2</b>
<b>02.041</b>	215,10	<b>20</b>	<b>14</b>	<b>300</b>	<b>1130</b>	<b>2,2</b>
<b>02.042</b>	215,10	<b>22</b>	<b>16</b>	<b>300</b>	<b>1130</b>	<b>2,2</b>
Accessories						
<b>02.037</b>	o. d.	Hollow extension rod Ø 18 x 300 mm				
<b>02.026</b>	o. d.	Replacement shovel SK-18				
<b>02.044</b>	o. d.	Replacement shovel SK-20				
<b>02.045</b>	o. d.	Replacement shovel SK-22				
<b>06.020</b>	18,70	Scraper SK-18				
<b>06.021</b>	18,70	Scraper SK-20/22				

## Soil probe S-41079

The soil probe is a tool for detecting (sensing) plow soles, soil compaction, and water permeability without diggin up the ground.

- Stainless steel Ø 8 mm
- Probe head Ø 10 mm
- Depth marks
- Penetration depth up to 900 mm
- Lightweight and handy

Art.-No	€/piece	Description
24.000	40,40	Soil probe S-41079



## Pulling device S-9003

The pulling device S-9003 is used to pull hand drills. For usage a striking head with 16 mm cross hole is required.

- Lifting height 750 mm
- Lifting capacity up to 550 kg
- Stepless lifting mechanism
- Fast and easy use to use
- Weight: 4,3 kg

Art.-No	€/piece	Description
10.052	224,30	Pulling device S-9003
Accessories		
05.005	39,60	Striking head with cross hole - M16
05.002	46,30	Striking head with cross hole - M20





## Mallets

Due to their plastic impact surface mallets are particularly suitable for driving hand drills and pasture piles into the ground.

### Version:

#### Simplex

- Malleable cast iron casing
- Replaceable wooden handle
- Replaceable super plastic inserts

#### Stitz

- Extra large hitting surface
- Plastic handle, low recoil
- Field proven



09.002

09.005



09.022



09.006



09.008



09.066

Art.-No	€/piece	Hitting surface Ø (mm)	Length (mm)	Weight ca. (kg)	Version
09.022	63,60	60	405	1,4	Simplex
09.002	126,80	80	800	3,1	Simplex
09.007	204,80	100	1000	5,2	Simplex
09.045	116,70	120	850	3,0	Stitz
09.005	170,00	140	950	4,0	Stitz
Spare parts					
09.061	17,10	Super plastic insert for Simplex 60			
09.003	33,50	Super plastic insert for Simplex 80			
09.006	46,00	Super plastic insert for Simplex 100			
09.066	8,60	Wooden handle 335 mm for Simplex 60			
09.004	27,30	Wooden handle 700 mm for Simplex 80			
09.008	42,00	Wooden handle 900 mm for Simplex 100			
Accessories					
29.262	3,60	Hex wrench AF 8 (size 60)			
29.263	4,20	Hex wrench AF 10 (size 80)			
29.266	7,80	Hex wrench AF 14 (size 100)			

## Edelman manual drill M16

The Edelman drill is used to remove soil material. It convinces with a minimum of friction when driving in and pulling out of the ground.

- **Connection thread M16**
- Screwable drill
- Robust and durable
- **Consisting of:**
  - 1x Edelman manual drill
  - 1x Hollow extension rod 22x1000 mm
  - 1x Striking head M16
  - 1x Rotary handle 525 mm



Art.-No	€/piece	Diameter (mm)	Shovel length ca. (mm)	Weight (kg)
Edelman manual drill				
<b>04.025</b>	262,50	<b>70</b>	<b>190</b>	<b>4,9</b>
<b>04.028</b>	265,70	<b>80</b>	<b>200</b>	<b>5,0</b>
Accessories				
<b>04.008</b>	o. d.	Replacement drill Ø 70 mm		
<b>04.029</b>	o. d.	Replacement drill Ø 80 mm		
<b>05.005</b>	39,60	Striking head M16		
<b>06.002</b>	43,10	Rotary handle 525 mm		
<b>02.001</b>	45,90	Hollow extension rod Ø 22x1000 mm		

## Extendable hand auger with bayonet connection

For the extraction of soil material and soil samples. Quick assembly due bayonet connection. Lightweight design.

- **Combination type** (sand-/clay type) for general use.
- **Sand type** for use in sandy soils. The shovel is slightly wider than the combination type.
- **Coarse sand type** for use in very loose soils. The shovel is particularly wide, so that the loose ground does not fall out.
- **Riverside auger** for use in solid soils above and below water level.
- **Stone type** (gravel auger) for use in soils with a high gravel and / or stone content. Particularly robust design.



Top with fixed handle



Extension



Combination type



Sand type



Coarse sand type



Riverside auger



Stone type

Art.-No	€/piece	Description
29.500	162,10	Top with removeable handle, length 0,6 m
29.501	84,90	Top with fixed handle, length 0,6 m
29.505	95,00	Extension length 1 m, incl. socket
29.510	136,30	Extendable hand auger Ø 70 mm, combination type
29.515	163,80	Extendable hand auger Ø 70 mm, sand type
29.517	227,00	Extendable hand auger Ø 70 mm, coarse sand type
29.511	156,30	Extendable hand auger Ø 100 mm, combination type
29.520	161,20	Extendable hand auger Ø 70 mm, riverside auger
29.525	167,50	Extendable hand auger Ø 70 mm, stone type

## Breaker hammers

The gasoline powered breakers are suitable for a wide range of applications like probing, breaking concrete, cutting asphalt or pounding and compacting gravel.

### Wacker BH 55

- Impact energy 55 J
- Impact rate 1300 min<sup>-1</sup>
- Length 777 mm
- Weight 24 kg
- Vibration levels 4,9 m/s<sup>2</sup>
- Sound level L<sub>WA</sub> = 109 dB
- Tool holder Ø 27x80 mm

Art.-Nr.	€/Stück	Bezeichnung
28.054	o. d.	Wacker BH 55, Ø 27x80 mm



### Cobra TTe

- Impact energy 40 J
- Impact rate 1620 min<sup>-1</sup>
- Length 927 mm
- Weight 24 kg
- Vibration levels 3,8 m/s<sup>2</sup>
- Sound level L<sub>WA</sub> = 109 dB

Art.-No	€/piece	Description
28.031	o. d.	Cobra TTe, Hex 32x160 mm
28.132	o. d.	Cobra TTe, Hex 25x108 mm
Accessories		
28.705	o. d.	Wooden transportation box Cobra TTe
28.706	o. d.	Trolley for breaker Cobra TTe



## Bosch GSH 16-30

A breaker with low weight and yet enormous impact energy.

- Nominal voltage 230 V / 50 Hz
  - Input 1750 W
  - Very lightweight breaker hammer
  - High performance with low weight
  - Vibration-control to reduce health-endangering vibrations
  - Good handling thanks to a large handle
  - Trolley included
- Impact energy 41 J
  - Impact rate 1300 min<sup>-1</sup>
  - Length 760 mm
  - Weight 16,5 kg
  - Tool shaft 30 mm
  - Vibration levels 13 m/s<sup>2</sup>



Art.-No	€/piece	Description
28.070	o. d.	Bosch GSH 16-30

## Makita HM1512

Powerful breaker with antiv-vibration technology AVT for low vibration emission.

- Nominal voltage 230 V / 50 Hz
  - Input 1850 W
  - High performance with low weight
  - Large handle with side adjustable grip
  - Transport case and chisel included in delivery
- Impact energy 48,5 J
  - Impact rate 1300 min<sup>-1</sup>
  - Length 809 mm
  - Weight 20,4 kg
  - Tool shaft 28 mm
  - Vibration levels 6,5 m/s<sup>2</sup>



Art.-No	€/piece	Description
28.018	o. d.	Makita HM1512

## Support stand S-9912

The functional support stand is basically indispensable when working in any terrain. With the support stand the breaker hammer will no longer get dirty compared to when it would need to be put to the ground. The breaker hammer can be set down quickly during probing. The convenient height of the handle facilitates probing.

Suitable for breaker hammers with following toolholder:

- Ø 27x80 mm, Hex 22x108 mm, Hex 25x108 mm, 30 mm, 28 mm
- Hex 32x160 mm requires additional socket ASC

Art.-No	€/piece	Description
10.141	67,10	Support stand S-9912
		Accessories
10.143	8,80	Socket ASC



## Milwaukee Spotlight

The Milwaukee spotlight is characterized by its up to **6000 lumen** LED lights with TRUEVIEW luminosity.

The spotlight is **height-adjustable from 1 m to 2,20 m** and thus allows nearly shadow-free work.

The **rotatable head** is equipped with **3 individually tiltable LED lights**. Thus, the light cone can be **adjusted over a large area** or **focused exactly** as desired.

Both mains operation and battery operation is possible!

- Up to 10 h runtime (M18 REDLITHIUM 8,0 Ah battery)
- 6000 lumens TRUEVIEW luminosity
- Height-adjustable up to 2,20 m
- Weight ca. 11 kg
- IP 34

Art.-No	€/piece	Description
27.100	o. d.	Milwaukee Spotlight
		Accessories
27.110	o. d.	Milwaukee Battery 8,0 Ah
27.115	o. d.	Milwaukee Battery charger



## Striking pens

They are needed to connect breaker hammers and extension rods.  
Connection: Internal thread.

- Heat treated steel
- Various tool shafts
- Field proven

Art.-No	€/piece	Thread	Tool shaft
Wacker			
07.004	113,10	M16	Ø 27x80 mm
07.005	113,10	M20	Ø 27x80 mm
07.040	113,10	M22	Ø 27x80 mm
17.652	124,10	GS	Ø 27x80 mm
18.260	126,90	RDS	Ø 27x80 mm
Red Hawk / Cobra			
07.003	108,80	M20	Hex 22x108 mm
07.041	108,80	M22	Hex 22x108 mm
17.650	119,20	GS	Hex 22x108 mm
18.261	125,10	RDS	Hex 22x108 mm
07.171	122,70	M20	Hex 25x108 mm
07.172	122,70	M22	Hex 25x108 mm
07.173	130,90	GS	Hex 25x108 mm
07.174	137,40	RDS	Hex 25x108 mm
07.026	181,20	M20	Hex 32x160 mm
07.027	181,20	M22	Hex 32x160 mm
17.658	184,80	GS	Hex 32x160 mm
18.265	191,70	RDS	Hex 32x160 mm
Makita / Bosch			
07.019	112,50	M16	30 mm
07.020	112,50	M20	30 mm
07.021	112,50	M22	30 mm
17.656	130,10	GS	30 mm
18.262	137,80	RDS	30 mm
Milwaukee / Makita / Bosch			
07.012	112,50	M20	28 mm
07.042	112,50	M22	28 mm
17.654	130,10	GS	28 mm
18.263	137,80	RDS	28 mm



Wacker  
Ø 27x80 mm



Red Hawk / Cobra  
Hex 22x108 mm



Makita  
30 mm



Milwaukee / Makita / Bosch  
28 mm



Cobra TTe / Proi  
Hex 32x160 mm

## Hydraulic lifting system S-2009

These hydraulic systems are used to pull extension rods and window samplers out of the soil. To pull them out a ball or jaw clamp is needed. The **lightweight compact hydraulic aggregate** with its integrated automatic switch device has a **weight of 25 kg only** and is specially designed for mobile use.

### Hydraulic aggregate:

- 4-stroke HONDA-gasoline engine
- The lifting unit switches automatically
- Bio-hydraulic oil
- Hydraulic hose 3 m
- Dimension (LxWxH): 465x340x510 mm
- Weight: **25 kg**



### 1. Lifting unit S-42:

Lifting force: **70 kN**  
Opening diameter:  $\varnothing$  86 mm  
Lifting speed up to: **120 cm/min**  
Weight: 20 kg

### 2. Lifting unit S-52:

Lifting force: **110 kN**  
Opening diameter:  $\varnothing$  86 mm  
Lifting speed up to: **80 cm/min**  
Weight: 24 kg

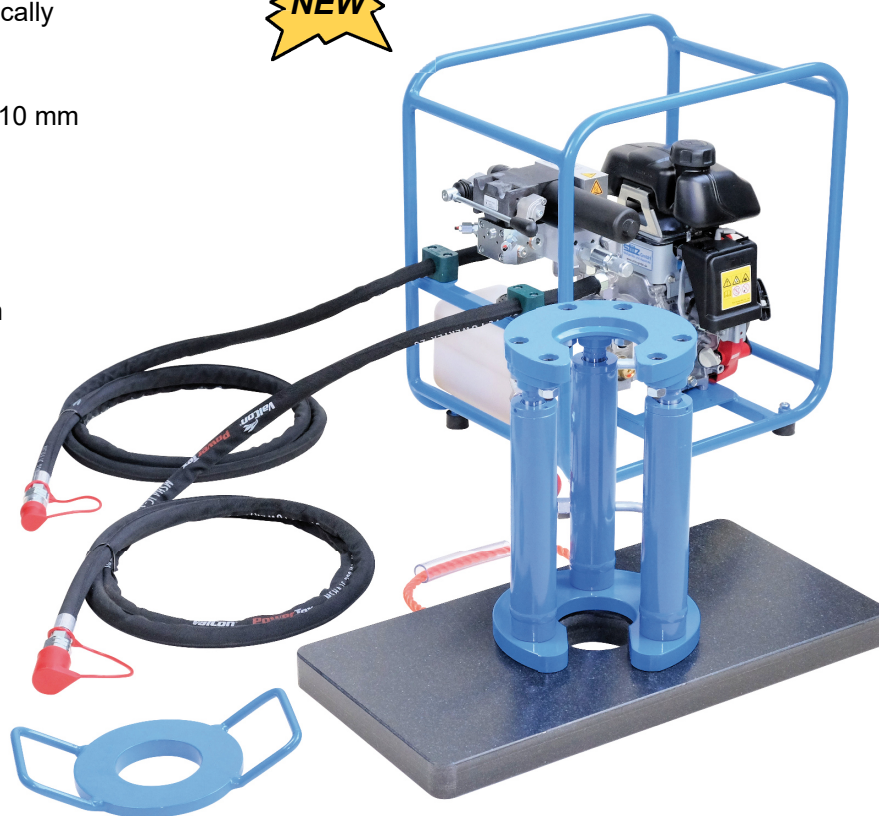


Plate for lifting unit

(Picture with optional filter system)

### Additionally included in the delivery:

- **PE bottom plate:** Double-sided smooth surface with carrying loop.
- **Plate for lifting unit:** For a stable load uptake. With lateral mounted handles.

### Optional:

- **Hydraulic filter system**  
The main cause of breakdowns and standstill is dirt in the hydraulic system. Our new hydraulic filter system reduces pollution in the hydraulic system and therefore, extends its lifetime.

Art.-No	€/piece	Description
10.375	o. d.	Hydraulic lifting system S-2009 / S-42
10.377	o. d.	Hydraulic lifting system S-2009 / S-52
Optional		
10.285	o. d.	Hydraulic filter system SHF



## Hydraulic lifting system SZ

### Hydraulic aggregate:

- Power-aggregate with 4-stroke HONDA gasoline engine
- Gear pump with one volume flow
- Hydraulic tank with bio-hydraulic oil
- The lifting unit switches automatically
- Dimension (LxWxH): 640x390x420 mm
- Weight: 41 kg

The hydraulic aggregate is available with three lifting units.

#### 1. Lifting unit S-42:

Lifting force: **90 kN**  
Opening diameter: Ø 86 mm  
Lifting speed up to: **180 (270) cm/min**  
Weight: 20 kg

#### 2. Lifting unit S-52:

Lifting force: **140 kN**  
Opening diameter: Ø 86 mm  
Lifting speed up to: **120 (180) cm/min**  
Weight: 24 kg

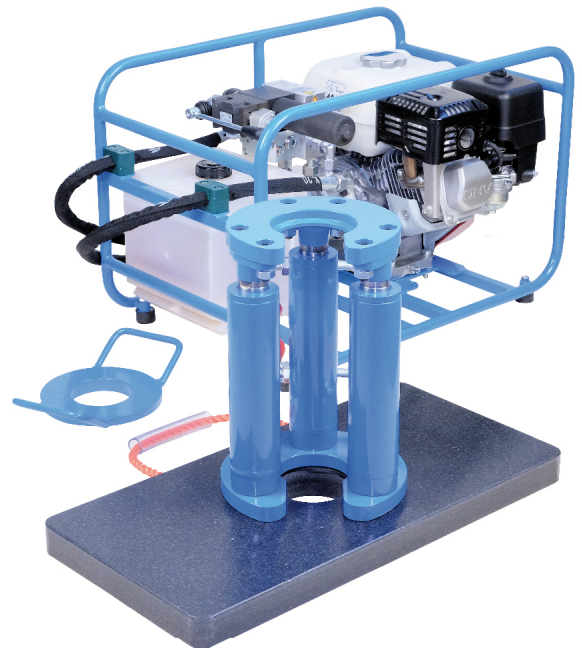
#### 3. Lifting unit S-61:

Lifting force: **200 kN**  
Opening diameter: Ø 86 mm  
Lifting speed up to: **80 (120) cm/min**  
Weight: 31 kg

**Delivery includes bottom plate and plate for lifting unit.**

### Optional:

- **Hydraulic aggregate with wheel-set**  
Incl. 4 PU-wheels, removable drawbar, mount for bottom plate and lifting unit.
- **Hydraulic filter system**  
For less wear, with replaceable filter element.
- **Speed lifting device**  
Higher lifting speed (value in brackets).



Art.-No	€/piece	Description
10.400	o. d.	Hydraulic lifting system SZ / S-42
10.401	o. d.	Hydraulic lifting system SZ / S-52
10.402	o. d.	Hydraulic lifting system SZ / S-61
Optional with wheel-set		
10.403	o. d.	Hydraulic lifting system SZ-R / S-42
10.404	o. d.	Hydraulic lifting system SZ-R / S-52
10.405	o. d.	Hydraulic lifting system SZ-R / S-61
Optional		
10.285	o. d.	Hydraulic filter system SHF

## Hydraulic lifting system SZE

### Hydraulic aggregate:

- Electric motor 1,1 kW, 230 V / 50 Hz
- Gear double pump with two volume flows
- Automatic volume flow control
- Hydraulic tank with bio-hydraulic oil
- The lifting unit switches automatically
- Dimension (LxWxH): 640x390x420 mm
- Weight: 38 kg

The hydraulic aggregate is available with two lifting units.

### 1. Lifting unit S-42:

Lifting force: **90 kN**  
Opening diameter:  $\varnothing$  86 mm  
Lifting speed up to: **180 cm/min**  
Weight: 20 kg

### 2. Lifting unit S-52:

Lifting force: **140 kN**  
Opening diameter:  $\varnothing$  86 mm  
Lifting speed up to: **110 cm/min**  
Weight: 24 kg



Delivery includes bottom plate and plate for lifting unit.

### Optional:

- **Hydraulic aggregate with wheel-set**  
Incl. 4 PU-wheels, removable drawbar, mount for bottom plate and lifting unit.
- **Hydraulic filter system**  
For less wear, with replaceable filter element.



Art.-No	€/piece	Description
10.394	o. d.	Hydraulic lifting system SZE / S-42
10.395	o. d.	Hydraulic lifting system SZE / S-52
Optional with wheel-set		
10.397	o. d.	Hydraulic lifting system SZE-R / S-42
10.398	o. d.	Hydraulic lifting system SZE-R / S-52
Optional		
10.285	o. d.	Hydraulic filter system SHF

## One arm pulling device

Mechanical pulling device for rod extraction. The clamping of window samplers and extension rods is mainly done using ball clamps

- Lifting capacity 3000 kg
- Passage Ø 84 mm
- Solid construction
- Optimal lifting mechanism
- Sturdy, rigid crow bar
- Dimension (LxWxH): 275x220x270 mm
- Weight: 16,20 kg (without crow bar)
- Field proven
- Incl. crow bar



Art.-No	€/piece	Description
<b>10.085</b>	o. d.	<b>One arm pulling device incl. crow bar</b>
Accessories		
<b>10.013</b>	o. d.	Crow bar Ø 45x1700 mm
<b>11.266</b>	o. d.	PE bottom plate
<b>10.700</b>	o. d.	Distance platform

## Two arm pulling device

Mechanical pulling device. Clamping of window samplers and extension rods is mainly done using ball clamps or jaw clamps.

- Lifting capacity 6000 kg
- Passage Ø 84 mm
- Extremely resistant
- Robust welded construction
- Sturdy, rigid crow bar
- Dimension (LxWxH): 370x220x270 mm
- Weight 22,4 kg (without crow bar)
- Field proven
- Incl. two crow bars



Art.-No	€/piece	Description
<b>10.080</b>	o. d.	<b>Two arm pulling device incl. two crow bars</b>
Accessories		
<b>10.013</b>	o. d.	Crow bar Ø 45x1700 mm
<b>11.266</b>	o. d.	PE bottom plate
<b>10.700</b>	o. d.	Distance platform

## Pulling device S-9000

The pulling device S-9000 is used to extract hand drills and grooved rods. A striking head with 16 mm cross hole is required.

- Lifting height 1000 mm
- Lifting capacity 550 kg
- Stepless lifting mechanism
- Fast and easy to use
- Lightweight & handy
- Weight: 5,5 kg

Art.-No	€/piece	Description
10.041	273,10	<b>Pulling device S-9000</b>
Accessories		
05.005	39,60	Striking head with cross hole - M16
05.002	46,30	Striking head with cross hole - M20



## Pulling device S-9002

The handy pulling device S-9002 is used to extract rods with a diameter of 22 mm. Proven to be particularly suitable for the lightweight penetrometer DPL.

- Lifting capacity 1000 kg
- Stepless lifting mechanism
- Fast and easy to use
- One-person operation
- Weight: 8,1 kg
- Incl. crow bar

Art.-No	€/piece	Description
10.043	375,70	<b>Pulling device S-9002</b>



## Ball clamp

Used for clamping rods during extraction work. Ball clamps surround the rod in a circle punctiform.

- For high traction and clamping forces
- Screw-on cap
- Handle for easy release of the clamp
- Robust and long-lasting

Art.-No	€/piece	Clamping range (mm)	Ball rows	Weight (kg)
10.006	384,50	22 - 36	2	9,0
10.009	408,50	32 - 36	4	6,7
10.118	524,00	25 - 43	2	9,2
10.117	534,50	32 - 44	2	11,0
10.115	485,60	36 - 53	2	10,4
10.119	530,10	60 - 67	1	6,5



## Jaw clamp

Used for clamping rods during extraction work. A jaw clamp casing is needed for the various jaw clamps. Jaw clamps surround the rod circularly over a larger area.

- Transport handle
- Solid construction
- Easy replacement of the clamps inserts

Art.-No	€/piece	Clamping range (mm)	Weight (kg)
Jaw clamp			
10.553	331,70	22 - 25	7,2
10.554	331,70	32 - 36	6,9
10.555	331,70	36 - 42	6,8
10.556	331,70	42 - 46	6,5
10.557	331,70	50 - 54	7,2
10.558	331,70	60 - 64	5,6
10.559	331,70	68 - 72	7,2
10.560	331,70	80 - 84	6,2
Jaw clamp casing			
10.550	291,90		12,0



Jaw clamp



Jaw clamp casing

## Rod rescuer S-9100

The rod rescuer is designed to **rescue rods and window samplers** which are stuck in the drilling hole, e.g. due to breakage of the threaded nipple. To use the rod rescuer the drilling hole needs a minimum diameter of Ø 60 mm.

Art.-No	€/piece	Clamping range (mm)	Thread
28.454	358,20	32	M20
28.456	358,20	36	M20
28.462	358,20	32	M22
28.457	358,20	36	M22
28.466	358,20	36	GS
28.467	358,20	36	RDS



## Tube for pulling device

The tube allows gentle pulling of window samplers. Primarily, the clamps are attached to the extension rods. Often only one clamp is needed for the rods.

- Can be used with two arm pulling device and lifting units S-42, S-52 and S-61.

Art.-No	€/piece	Passage (mm)	Length (mm)	Weight (kg)
10.100	183,90	85	600	5,8



## Penetrometer RSG

The penetrometer RSG is used for ground surveys and site investigation. With the addition of different weights, it can be used for lightweight (DPL), medium (DPM) and heavy (DPH) dynamic probing. Unevenness at the probing point can be compensated by adjusting spindles.

The sturdy design with endless chain drive and the penetration device with shockdamped carrier ensure reliability and a long operational life span.

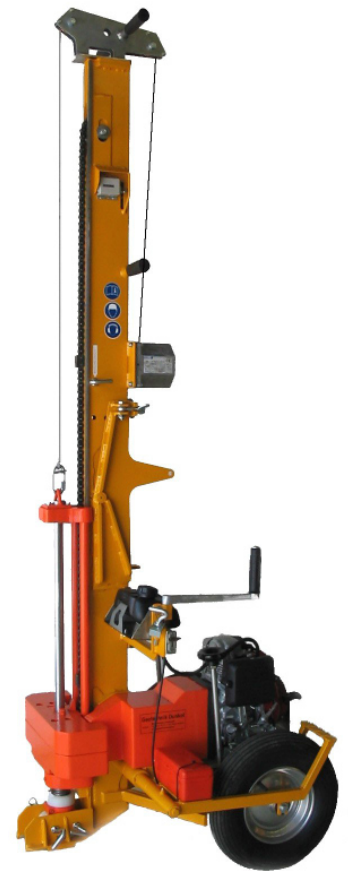
All devices are equipped with a level-indicator, impact counter, 1 piece of falling weight 10 kg and 2 pcs. of falling weights 20 kg.

### Probing device RSG 135 - gasoline engine - hinged mast

Technical data:

- Impact rate: up to 15-30 impacts/min
- Height with folded pylon: ca. 1520 mm
- Dimension (HxWxL): 2370x790x780 mm
- Weight: ca. 110 kg (without additional weights)

Art.-No	€/piece	Description
11.230	o. d.	Penetrometer RSG-B, hinged mast



### Penetrometer RSG 135 - electric engine - hinged mast

Technical data:

- Electric engine: 220V / 50Hz / 1,8 kW
- Impact rate: up to 15-30 impacts/min
- Height with folded pylon: ca. 1520 mm
- Dimension (HxWxL): 2370x790x780 mm
- Weight: ca. 112 kg (without additional weights)

Art.-No	€/piece	Description
11.204	o. d.	Penetrometer RSG-E, hinged mast



## Pneumatic operated lightweight penetrometer DPL (upgradeable to DPM)

This penetrometer is used for **dynamic probing light (DPL)** to measure the penetration resistance during soil investigation. Soil investigation can be **quickly** executed and are suitable for testing solidity changes in the ground.

The **compact compressor aggregate DPL** with 4-stroke HONDA-gasoline engine is mounted in a sturdy carrying frame and offers **functional storage space** for accessories and the penetrometer.

The impact rate of the penetrometer can be adjusted via an easily accessible **volume flow controller**. Due to the **integrated hand valve** on the compressed-air hose one person can turn the device on or off.

**Easy handling** and its **low weight** provide **high mobility** in the terrain.

### Penetrometer DPL:

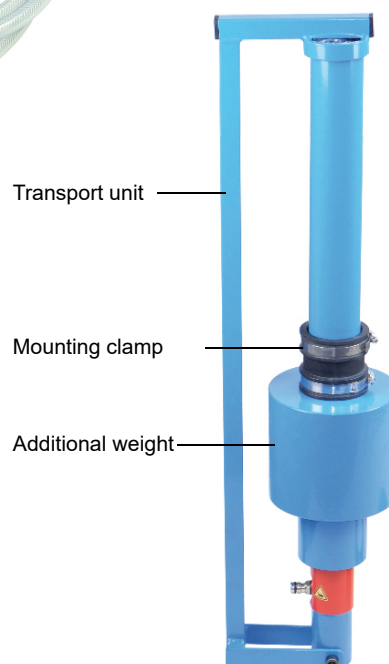
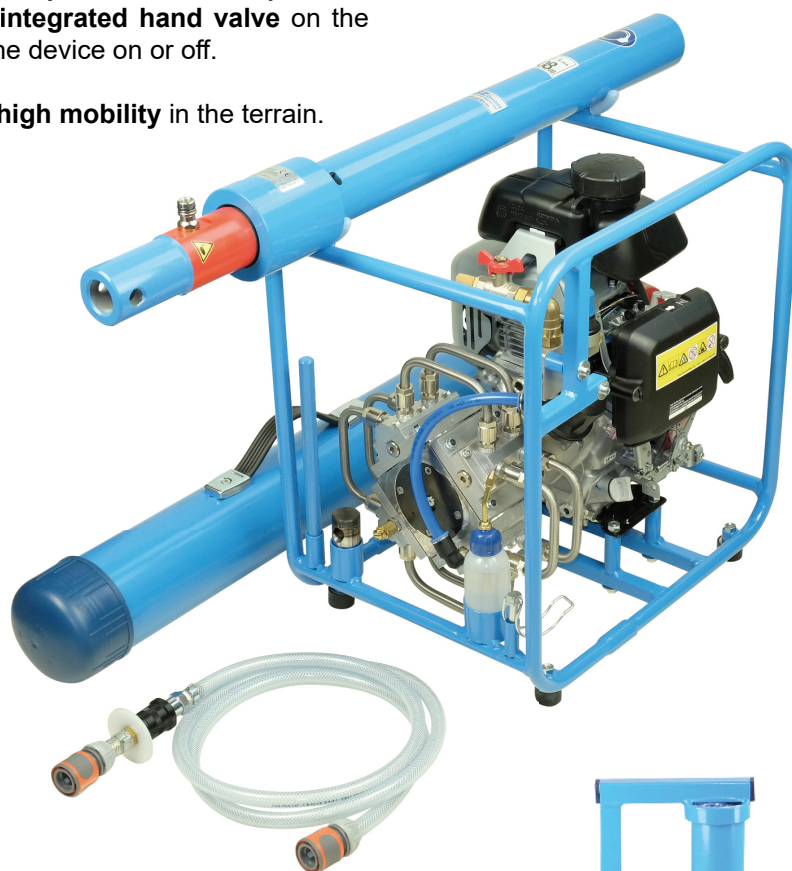
- Height of fall 50 cm
- Falling weight 10 kg
- Compressed air connection
- Weight: 16 kg

### Compressor aggregate - DPL:

- Honda-4-stroke-gasoline engine
- Volume flow controller
- Air filter
- Carrying frame with rubber buffers
- Dimension (LxWxH): 465x340x510 mm
- Weight ca.: 24 kg

### Accessories:

- Rotary staff for striking head
- Linch pin
- Plastic oiler with special oil
- Striking head with thread M16
- Compressed air hose with hand valve
- Transport box for penetrometer



Art.-No	€/piece	Description
11.340	o. d.	Pneumatic dynamic probing light DPL
11.347	o. d.	Pneumatic dynamic probing medium DPM
Accessories		
8908	o. d.	Mounting clamp - DPM
11.059	o. d.	Additional weight 20 kg - DPM
11.103	o. d.	Transport unit - DPM



## Pneumatic operated lightweight penetrometer DPL-R (upgradeable to DPM)

The compressor aggregate DPL-R is optionally available as a version with **wheels** and **various storage options**.

Thanks to the **solid rubber tires**, the compressor aggregate is suitable for mobile use in the field.

The two **storage compartments** hold up to 6 pcs. rods  $\varnothing$  22x1000 mm  
The **tool compartment** to the side ensures that the tools are safely stored.  
The **drawbar is removable** and can be stored on the frame to save space for transport in the vehicle.

### Penetrometer DPL:

- Height of fall 50 cm
- Falling weight 10 kg
- Compressed air connection
- Weight: 16 kg

### Compressor aggregate - DPL-R:

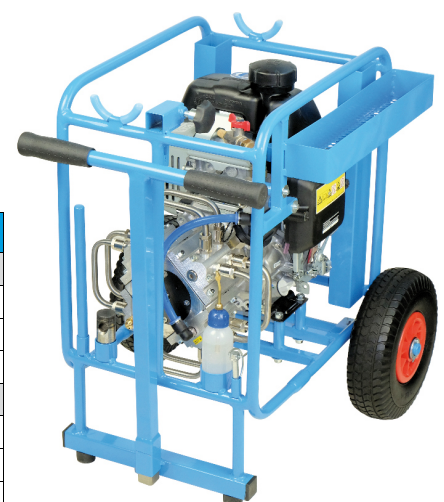
- Honda-4-stroke-gasoline engine
- Volume flow controller
- Air filter
- Frame with wheels
- Storage place for 6 pcs. rods  $\varnothing$  22x1000 mm (rods are not included in the scope of delivery)
- Tool compartment
- Removeable drawbar
- Dimension (LxWxH): 574x540x636 mm
- Weight ca.: 33,5 kg

### Accessories:

- Rotary staff for striking head
- Linch pin
- Plastic oiler with special oil
- Striking head with thread M16
- Compressed air hose with hand valve
- Transport box for penetrometer



(rods are not included in the scope of delivery)



Art.-No	€/piece	Description
11.345	o. d.	Pneumatic dynamic probing light DPL-R
11.349	o. d.	Pneumatic dynamic probing medium DPM-R
Accessories		
8908	o. d.	Mounting clamp - DPM
11.059	o. d.	Additional weight 20 kg - DPM
11.103	o. d.	Transport unit - DPM

## Pneumatic operated heavyweight penetrometer DPH for soil investigation

This penetrometer is used for **dynamic probing heavy & medium (DPH & DPM)** to measure the penetration resistance during soil investigation. The 50 kg falling weight is pneumatically lifted at lifting height and falls down at the anvil, thereby transfers the energy to the rod.

The **high-performance compressor aggregate** with gasoline engine is mounted in a **sturdy carrying frame**. This aggregate can be used for light, medium and heavy dynamic probing (DPL, DPM, DPH).

Penetrometer and compressor aggregate are connected by a hose with quick couplings. **All controls are easily accessible and clearly arranged.**

By removing the 20 kg weight, the penetrometer DPH can be quickly converted to the penetrometer DPM.



Pic.: Compressor aggregate DPH-R

### Penetrometer DPH:

- Height of fall 50 cm
- Falling weight 50 kg
- Removable weight 20 kg
- Compressed air connection
- Weight: 65 kg

### Compressor aggregate DPH:

- 4-stroke-gasoline engine
- Rotary compressor
- Volume flow controller
- Air filter
- Carrying frame with rubber buffers
- Dimension (LxWxH): 640x390x420 mm
- Weight: 41 kg

### Accessories:

- Compressed air hose with quick coupling
- Striking head with thread M20
- Plastic oiler with special oil
- Allen key



Art.-No	€/piece	Description
11.120	o. d.	Pneumatic dynamic probing heavy DPH
11.125	o. d.	Pneumatic dynamic probing heavy DPH-R

## DPH-Caddy-Lifter S-180

The **functional** DPH-Caddy-Lifter S-180 is a **helpful addition** for use of the Stitz heavyweight penetrometer DPH.

It can be used to **transport** the penetrometer, as well as for **direct operation** of the penetrometer.

DPH-Caddy-Lifter can take up the penetrometer and **transport it to the drilling point**. Thanks to the four **adjustable parking supports**, the mast can be levelled in case of uneven ground. Thus rods can be vertically driven into the ground.

Using a **hand winch** the penetrometer is cranked up and then lowered onto the striking head screwed on the rod.

Due to the **attached compressed air connection** on the mast, the penetrometer can be switched on and off.

The pluggable support wheels in the front and other parts plugged onto the DPH-Caddy-Lifter S-180 can be removed for transport. Transport weight is ca. 39,7 kg.

- Lifting height 1480 mm
- Lifting capacity 70 kg
- Solid rubber wheels
- Dimension (LxWxH): 1330x690x1820 mm
- Dimension for transport (LxWxH): 560x690x1820 mm
- Weight: ca. 64,2 kg



Pic.: Caddy-Lifter S-180 with penetrometer

Art.-No	€/piece	Description
11.130	o. d.	DPH-Caddy-Lifter S-180
Accessories		
11.145	o. d.	Striking head M20
10.142	o. d.	Support stand for DPH

## Pneumatic operated lightweight penetrometer E-DPL for soil investigation

Compact compressor aggregate with **electric engine** and only 13,5 kg in weight is suitable for use with the **penetrometer DPL**.

### Penetrometer DPL:

- Height of fall 50 cm
- Falling weight 10 kg
- Compressed air connection
- Weight: 16 kg

### Compressor aggregate E-DPL:

- Electric engine 0,35 kW, 230V / 50Hz
- Rotary compressor
- Volume flow controller
- Air filter
- Carrying frame with rubber buffers
- Dimension (LxBxH): 340x200x450 mm
- Weight: 13,5 kg

### Accessories:

- Rotary staff for striking head
- Linch pin
- Plastic oiler with special oil
- Striking head with thread M16
- Compressed air hose with hand valve
- Transport box for penetrometer



Art.-No	€/piece	Description
11.108	o. d.	Pneumatic dynamic probing light E-DPL

## Pneumatic operated heavyweight penetrometer E-DPH for soil investigation

Electric compressor aggregate used for **dynamic probing light, medium and heavy (DPL, DPM, DPH)**. All controls are easily accessible and clearly arranged.

### Penetrometer DPH:

- Height of fall 50 cm
- Falling weight 50 kg
- Removable weight 20 kg
- Compressed air connection
- Weight: 65 kg

### Compressor aggregate E-DPH:

- Electric engine 1,1 kW, 230V / 50Hz
- Rotary compressor
- Volume flow controller
- Air filter
- Frame with wheel-set
- Dimension (LxWxH): 690x590x550 mm
- Weight: ca. 56,3 kg

### Accessories:

- Compressed-air hose with quick couplings
- Striking head with thread M20
- Plastic oiler with special oil
- Allen key



Art.-No	€/piece	Description
11.107	o. d.	Pneumatic dynamic probing heavy E-DPH

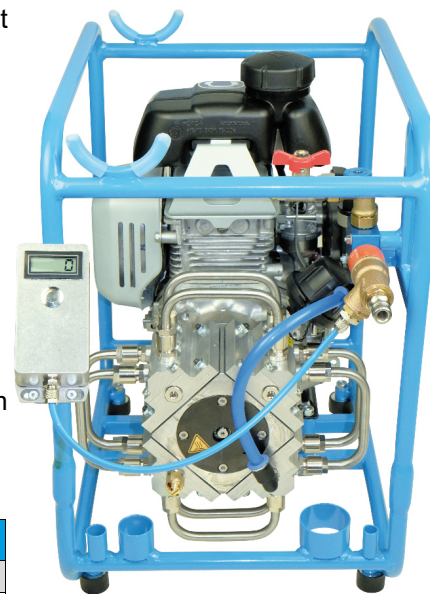
## Impact counter S-260

Inexpensive accessory for pneumatic probing. Indicates the impacts without reference to the depth since the last reset.

- Durable aluminum casing with large display, reset-button and connection coupling
- Incl. 2x battery 1,5 V, type AA
- Dimensions (LxWxH): 143x60x45 mm
- Weight: 310 g
- Suitable for Stitz pneumatic penetrometer, type DPL, DPM, DPH

Delivery includes assembly kit with T-piece, attachment holder for Ø 18 mm and air hose.

Art.-No	€/piece	Description
11.173	373,20	Impact counter S-260 - Set A



Pic.: Impact counter with compressor aggregate

## Transport tool DPM/DPH

Lightweight and small-sized tool to carry heavyweight Stitz DPM and DPH penetrometer.

- Rubber handles and safety bolt for safe transport
- Suitable for Stitz DPM and DPH penetrometer
- Dimensions: 1020x285x190 mm
- Weight: ca. 3,5 kg

Art.-No	€/piece	Description
11.117	301,80	Transport tool DPM/DPH



## Torque wrench S-280

according DIN EN 22476-2

The torque wrench is required for a proper analysis according to DIN EN 22476-2.

- Measuring range 56 - 280 Nm
- Optical indicator and drag pointer



Art.-No	€/piece	Description
11.500	o. d.	Torque wrench S-280
Accessories		
50.094	33,00	Adapter 1/2"-square drive - M16
50.095	34,10	Adapter 1/2"-square drive - M20

## Dynamic probing cones

Used for dynamic probing and geotechnical investigation according to DIN EN 22476-2. The lost dynamic probing cone is put on the rod and remains in the drilling hole when the rod is pulled out again.

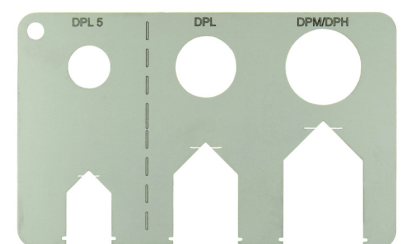
Art.-No	€/piece	Cross section (cm <sup>2</sup> )	Cone-Ø (mm)	Thread
Dynamic probing cone with thread				
11.001	21,60	5	25,2	M16
11.007	24,90	10	35,7	M16
11.025	25,60	15	43,7	M20
Lost dynamic probing cone				
11.019	9,50	15	43,7	-



## Template for wear limit control of probing cones

According to DIN EN 22476-2 cones used for dynamic probing must be checked for accuracy and be replaced when worn. The cone meter allows a quick control of the cones without measurement.

Art.-No	€/piece	Description
11.035	33,70	Template for wear limit control of probing cones



## Lightweight penetrometer

The **lightweight** penetrometer is used to **quickly measure the penetration resistance** during soil investigations.

With help of a falling drop weight, the rod with screwed on cone is driven into the ground. **Weight and falling height of the falling weight is defined.** Penetration depth and the number of impacts is to be recorded. Dynamic probing can be executed quickly using this device. It can also be used for **testing solidity changes** in the soil.

- Solid construction
- One-person system
- Comprehensive accessories
- Field proven



Art.-No	€/piece	Description
<b>11.023</b>	1.350,80	<b>Lightweight penetrometer - Set</b> Consisting of:
<b>11.002</b>	o. d.	Anvil
<b>11.004</b>	o. d.	Drop weight 10 kg
<b>11.003</b>	o. d.	Guide rod with handgrip
<b>11.007</b>	o. d.	Dynamic probing cone 10 cm <sup>2</sup>
<b>02.001</b>	o. d.	Extension rod Ø 22x1000 mm, 6 pcs.
<b>04.080</b>	o. d.	Open-end wrench AF 11
<b>04.082</b>	o. d.	Open-end wrench AF 19, 2 pcs.
<b>04.064</b>	o. d.	Open-end wrench AF 27
<b>10.043</b>	o. d.	Pulling device S-9002, lifting capacity 1000 kg
<b>05.203</b>	o. d.	Aluminium transportbox (LxWxH) 1240x385x385 mm
Accessories		
<b>11.001</b>	21,60	Dynamic probing cone 5 cm <sup>2</sup>



## Handcart SH

The steerable 2-axle handcart SH is thanks to its sturdy welded steel construction suitable to **transport the lightweight penetrometer from STITZ**.

To **transport** the equipment, either the **aluminum transportbox** of the lightweight penetrometer from STITZ or alternatively the **plastic transport case** can be used.

Optional **probe rod holder** can be mounted on the side of the handcart for **additional storage** of the probe rods.

The handcart can be **disassembled into four stowable individual parts**. These parts can be **stowed inside the aluminum transportbox**.

- Dimensions (LxWxH): 1325x560x1180 mm (without box)
- Weight: approx. 14,8 kg (without box)
- Loading capacity max. 150 kg
- Solid rubber tyre



Pic.: 12.066 - Handcart SH-2120



Pic.: 12.060 - Handcart SH-2100



Pic.: 12.065 - Handcart SH-2110

Art.-No	€/piece	Description
<b>12.060</b>	o. d.	<b>Handcart SH-2100</b>
<b>12.065</b>	o. d.	<b>Handcart SH-2110, incl. alu-transportbox</b>
<b>12.066</b>	o. d.	<b>Handcart SH-2120, incl. transport case plastic</b>
Zubehör		
<b>05.201</b>	o. d.	Alu-transportbox (LxWxH) 1240x385x385 mm
<b>05.205</b>	o. d.	Transport case plastic (LxWxH) 1200x400x147 mm
<b>12.062</b>	o. d.	Probe rod holder

## Soil-air probe S-2388

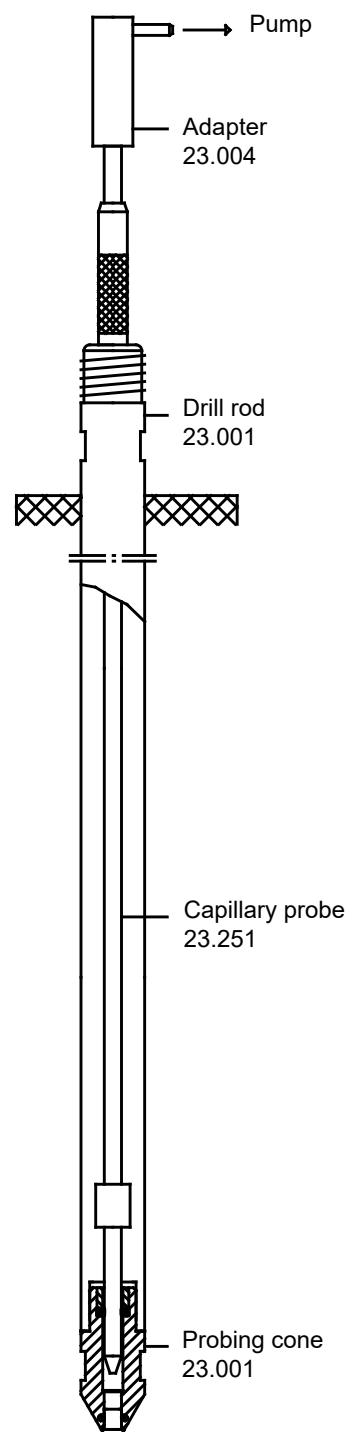
Used to extract air from the soil. Either from a defined depth of the unsaturated bottom zone or from a pre-probed drilling hole with a surface sealing.

Contaminated groundwater or soil diffuse volatiles gaseous substances into the open pore space of the surrounding soil. These volatile substances, in particular halogenated hydrocarbons, gasoline, fuels and aromatics can be determined in the soil by sampling and analysing soil-air. Soil-air measurements are suitable to determine the distribution of pollutants and main areas of pollutant loads. Furthermore, plumes of contaminated loads can be determined in the ground water. Leaks, pollutant drifts and sources of contamination can be detected quickly and without great effort.

The rod is driven into the ground. Afterwards the capillary probe is inserted into the rod and breaks through the airlock in the probing cone.

The cone of the probe is now open. With the help of a pump, the soil-air can be pumped up from the surrounding soil and be captured in a test tube or directly evaluated by a measuring instrument. The airlock prevents the exchange of atmospheric air and soil-air.

- Solid construction
- Fast and easy to use
- Field proven



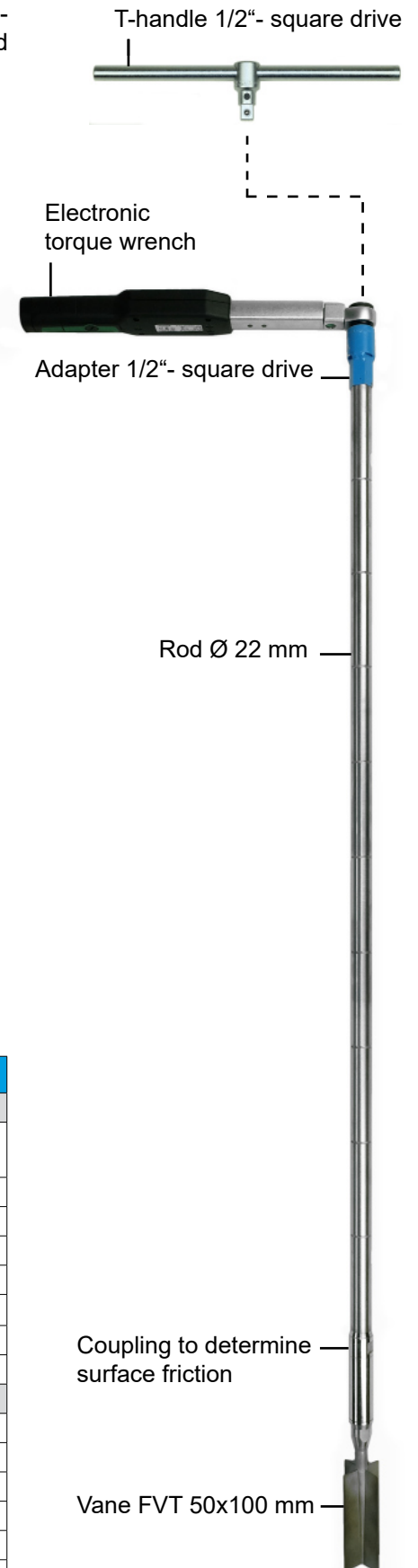
Art.-No	€/piece	Description
<b>23.601</b>	430,20	<b>Soil-air probe S-2388</b> Consisting of:
<b>23.100</b>	o. d.	Probing cone with airlock
23.101	o. d.	- Probing cone Ø 22 mm
23.102	o. d.	- Rivet, 11 Stck.
23.065	o. d.	- O-ring 6x1,5 mm
23.103	o. d.	- Airlock
23.104	o. d.	- Screw plug
<b>23.001</b>	o. d.	Hollow drill rod Ø 22x1000 mm
<b>23.251</b>	o. d.	Capillary probe
<b>23.004</b>	o. d.	Adapter with hose connector Ø 7 mm
<b>23.260</b>	o. d.	Striking head S-M20
<b>Accessories</b>		
<b>23.040</b>	210,20	Extension set 1 m Consisting of:
23.009	o. d.	- Hollow drill rod-extension Ø 22x1000 mm
23.008	o. d.	- Screw bush Ø 28x76 mm
23.020	o. d.	- Capillary rod extension
<b>23.003</b>	o. d.	Hollow drill rod Ø 22x1000 mm, incl. Screw bush
<b>04.081</b>	16,80	Open-end wrench AF 13
<b>06.001</b>	40,40	Rotary handle
<b>04.082</b>	25,90	Open-end wrench AF 19, 2 pcs. needed
<b>04.084</b>	29,90	Open-end wrench AF 24
<b>23.261</b>	o. d.	Striking head S-M22

## Vane shear device according to DIN 4094-4

The vane shear device is used to determine the shear resistance of geotechnical field investigations according to DIN 4094-4. Investigations are limited to water-saturated fine-grained soils.

- **Electronic torque wrench**

- Menu navigation on a large display
- Measuring range 3 - 60 Nm
- Margin of error 1% according to DIN 4094-4
- Data storage and USB data output



Art.-No	€/piece	Description
<b>28.727</b>	o. d.	<b>Vane shear device according to DIN 4094-4 - Set</b> Consisting of:
<b>28.730</b>	o. d.	Vane FVT 50x100 mm
<b>28.732</b>	o. d.	Coupling to determine surface friction
<b>50.094</b>	o. d.	Adapter 1/2"- square drive - M16
<b>28.745</b>	o. d.	T-handle 1/2"- square drive
<b>28.724</b>	o. d.	Electronic torque wrench
<b>28.712</b>	o. d.	Aluminium carrying case
Accessories		
<b>02.001</b>	45,90	Hollow extension rod Ø 22x1000 mm - M16
<b>02.400</b>	o. d.	Hollow extension rod Ø 22x500 mm - M16
<b>04.082</b>	25,90	Open-end wrench AF 19
<b>3902</b>	42,00	Ring spanner AF 22
<b>28.731</b>	o. d.	Vane FVT 75x150 mm
<b>28.721</b>	o. d.	Torque wrench software and wiring

## Water sampler S-9097 „Direct Push (DP)“ - Procedure

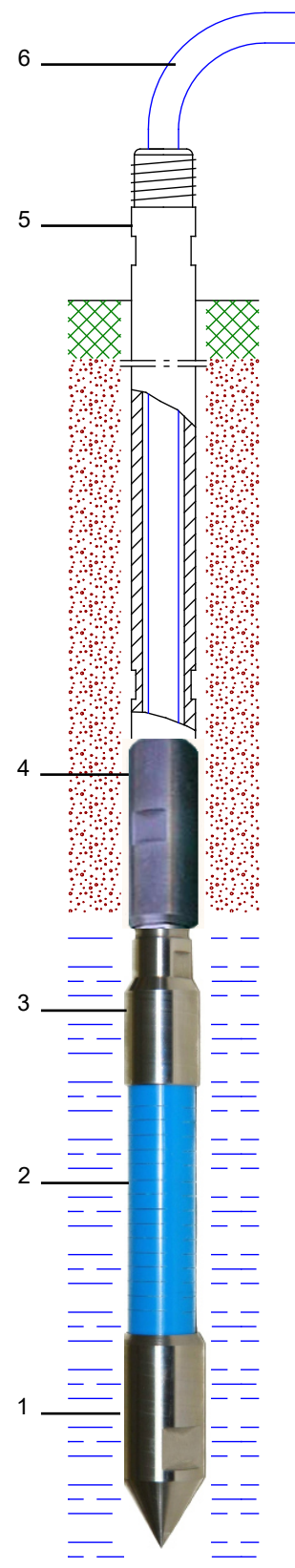
The water sampler S-9097 allows, a cost-effective sampling of groundwater and capillary space.

The water sampler S-9097 is driven into the ground to investigate depth either by hand or machine. A replaceable external filter (2) allows water to enter the filter tube. By a hose (6), which slides through the hollow rod (5), the water is pumped up. The passage in the hollow rod is 12 mm. Using a foot valve pump SL-AD 11/9 mm, water is pumped up from a depth of up to 20 m.

After samples are taken from one depth, the sampler can be driven further into the ground for additional groundwater analyses.

Efficient application for determining contamination and its spatial extent, as well as for soil investigation and aggressiveness towards concrete.

- Solid construction
- Steel cone Ø 32 mm
- Filter diameter Ø 25 mm
- Filter length ca. 80 mm
- Slot width ca. 0,2 mm
- Fast and easy to use
- Cheap alternative to expensive methods
- Field proven



Art.-No	€/piece	Description
<b>28.700</b>	351,10	<b>Water sampler S-9097</b> Consisting of:
<b>23.404</b>	o. d.	Steel ram filter, consisting of
23.402	o. d.	- Steel cone Ø 32 mm (1)
23.405	o. d.	- External filter Ø 25x100 mm (2)
28.701	o. d.	- Filter tube
28.704	o. d.	- Connector for filter tube S-9097 (3)
23.130	o. d.	- Seals, 2 pcs.
<b>23.003</b>	o. d.	Hollow drill rod Ø 22x1000 mm (5), incl. bush (4)
<b>23.260</b>	o. d.	Striking head S-M20
Accessories		
<b>28.251</b>	24,00	Foot valve pump SL-AD 11/9 mm
<b>28.783</b>	54,10	PE hose Ø 10x1 mm, 100 m (6)
<b>29.141</b>	594,80	Peristaltic pump SL-18 / Ø 10 mm
<b>29.160</b>	o. d.	Adapter SL - S-9097
<b>23.261</b>	o. d.	Striking head S-M22
<b>23.008</b>	o. d.	Screwable socket Ø 28 mm (4)
<b>23.009</b>	o. d.	Hollow drill rod Ø 22x1000 mm (5)
<b>04.082</b>	25,90	Open-end wrench AF 19
<b>04.084</b>	29,90	Open-end wrench AF 24
<b>04.085</b>	32,00	Open-end wrench AF 27

## Steel ram filter for water samplers S-9097

These steel ram filters are used to adjust the use of the water sampler S-9097. For easy cleaning of the filter elements, parts are screwable.

### Double steel ram filter S-9097

- Steel cone Ø 32 mm
- Filter diameter Ø 25 mm
- Filter length ca. 160 mm
- Slot width ca. 0,2 mm
- Overall length 428 mm

### Steel ram filter S-9097 - 450 mm

- Steel cone Ø 36 mm
- Filter diameter Ø 32 mm
- Filter length ca. 450 mm
- Slot width ca. 0,4 mm
- Overall length 600 mm

Art.-No	€/piece	Description
<b>29.130</b>	275,60	<b>Double steel ram filter S-9097</b> Consisting of:
<b>23.402</b>	o. d.	Steel cone Ø 32 mm
<b>23.405</b>	o. d.	External filter Ø 25x100 mm, 2 pcs.
<b>28.701</b>	o. d.	Filter tube, 2 pcs.
<b>29.125</b>	o. d.	Socket
<b>28.704</b>	o. d.	Connector for filter tube S-9097
<b>23.130</b>	o. d.	Seals, 4 pcs.
Accessories		
<b>04.082</b>	25,90	Open-end wrench AF 19
<b>04.084</b>	29,90	Open-end wrench AF 24
<b>04.085</b>	32,00	Open-end wrench AF 27

Art.-No	€/piece	Description
<b>29.120</b>	219,20	<b>Steel ram filter S-9097 - 450 mm</b> Consisting of:
<b>29.121</b>	o. d.	Steel cone Ø 36 mm
<b>29.122</b>	o. d.	External filter Ø 32x450 mm
<b>29.123</b>	o. d.	Filter tube
<b>29.124</b>	o. d.	Connector for filter tube S-9097
Accessories		
<b>04.082</b>	25,90	Open-end wrench AF 19
<b>04.086</b>	42,50	Open-end wrench AF 30



29.130

29.120

## Water sampler DP 32/42

This water sampler allows extracting cost-efficient groundwater samples.

### System with external filter

Through an external filter water flows into the sampling device. The hose is lowered through the hollow rod and water can be pumped up.

- Solid construction
- Continuous sampling



### System with extendable internal filter

The closed system is driven into the depth of investigation. Then the ejection rod with inner extension rod is inserted into the hollow rod. The lost probing cone is ejected and the internal filter is extended into the groundwater. Following sampling the water can be pumped out again.

- High stability
- Field proven filter system



Art.-No	€/piece	Description
<b>28.767</b>	265,00	<b>Water sampler DP 32/42 - external filter</b> Consisting of:
<b>28.761</b>	o. d.	Steel cone
<b>28.762</b>	o. d.	External filter
<b>28.763</b>	o. d.	Filter tube
<b>28.764</b>	o. d.	Connector for hollow drill rod
<b>28.630</b>	670,50	<b>Water sampler DP 32/42 - internal filter</b> Consisting of:
<b>28.606</b>	o. d.	Lost steel cone, with O-ring
<b>28.604</b>	o. d.	Holding tube for internal filter
<b>28.607</b>	o. d.	Guide bush
<b>28.615</b>	o. d.	Extendable internal filter, consisting of:
28.616	o. d.	- Locking screw
28.617	o. d.	- Internal filter with piston and O-ring
<b>28.602</b>	o. d.	Connector for hollow drill rod
<b>Accessories</b>		
<b>28.251</b>	24,00	Foot valve pump SL-AD 11/9 mm
<b>28.783</b>	54,10	PE hose Ø 10x1 mm, 100 m
<b>29.141</b>	594,80	Peristaltic pump SL-18 / Ø 10 mm
<b>29.161</b>	o. d.	Adapter SL - DP 32/42
<b>28.769</b>	o. d.	Ejection rod
<b>28.768</b>	o. d.	Inner extension
<b>28.766</b>	o. d.	Striking head DP 32/42 - M20
<b>28.785</b>	o. d.	Striking head DP 32/42 - M22
<b>28.765</b>	o. d.	Hollow drill rod Ø 32/42x1000 mm
<b>10.117</b>	534,50	Ball clamp for Ø 32-44 mm

## Peristaltic pump SL-18

The **battery-powered peristaltic pump** SL-18 is connected to the delivery hose via the hose holder sheet SHB. The **adapter SL** can be used to attach the peristaltic pump directly to the gauge tube.

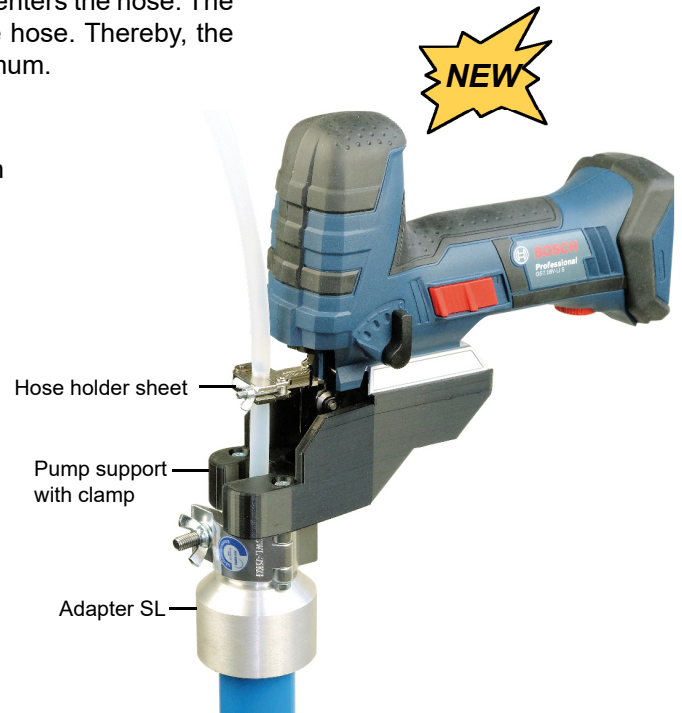
The liquid is conveyed by means of a **foot valve** and an **exchangeable** conveying hose with the adjustable peristaltic pump.

After immersing the foot valve pump in the water, water enters the hose. The water is conveyed by an **oscillating movement** of the hose. Thereby, the escape of volatile organic substances is kept to a minimum.

- Water sampling:  
Depending on PE hose up to max. 20 m hose length
- Conveyor flow:  
Depending on PE hose up to approx. 8 liters/min
- Variety of adapters for different gauge tubes
- Can be used with various PE hoses
- Optional long-life battery with 12,0 Ah



Foot valve pump



Art.-No	€/piece	Description
<b>29.141</b>	594,80	<b>Peristaltic pump SL-18 / Ø 10 mm</b>
<b>29.142</b>	594,80	<b>Peristaltic pump SL-18 / Ø 12 mm</b>
<b>29.143</b>	594,80	<b>Peristaltic pump SL-18 / Ø 14 mm</b>
Accessories		
<b>28.251</b>	24,00	Foot valve pump SL-AD 11/9 mm
<b>28.252</b>	24,00	Foot valve pump SL-AD 14/11 mm
<b>28.783</b>	54,10	PE hose Ø 10x1 mm, 100 m
<b>28.784</b>	56,30	PE hose Ø 12x1 mm, 100 m
<b>28.753</b>	117,90	PE hose Ø 14x2 mm, 100 m
<b>29.155</b>	o. d.	Hose holder sheet SHB 10, for hose Ø 10x1 mm
<b>29.156</b>	o. d.	Hose holder sheet SHB 12, for hose Ø 12x1 mm
<b>29.157</b>	o. d.	Hose holder sheet SHB 14, for hose Ø 14x2 mm
<b>29.161</b>	o. d.	Adapter SL - DP 32/42
<b>29.162</b>	o. d.	Adapter SL - DP 36/48
<b>29.163</b>	o. d.	Adapter SL - TR 32
<b>29.164</b>	o. d.	Adapter SL - TR 40
<b>29.165</b>	o. d.	Adapter SL - TR 50
<b>29.166</b>	o. d.	Adapter SL - TR 63
<b>29.168</b>	o. d.	Adapter SL - G 1 1/4
<b>29.170</b>	o. d.	Adapter SL - G 2
<b>29.182</b>	o. d.	Battery 18 V / 12,0 Ah
<b>29.183</b>	o. d.	Battery charger 18 V



Scope of delivery without battery and battery-charger

## Piston sampler

The piston sampler is applied to take soil samples from below groundwater level and for sandy sediment samples. The piston inside the tube is pulled up manually by using a piston rod it generates a negative pressure to retain the soil sample in the tube. The piston also serves to push out the soil sample.

- Bayonet connection
- Sample  $\varnothing$  38 mm, sample length up to 900 mm
- Changeable stainless steel tube

Art.-No	€/piece	Description
<b>29.535</b>	319,90	Piston sampler $\varnothing$ 40x1 mm, length 1000 mm
<b>29.536</b>	457,80	Piston sampler $\varnothing$ 40x1 mm, length 2000 mm
Accessories		
<b>29.537</b>	o. d.	Stainless steel tube for length 1000 mm
<b>29.538</b>	o. d.	Stainless steel tube for length 2000 mm
<b>29.539</b>	o. d.	Polyamid fiber rope 10 m for piston sampler
<b>29.501</b>	o. d.	Top with fixed handle, length 600 mm
<b>29.505</b>	o. d.	Extension, length 1000 mm, incl. socket





## Electric contact meter

Electric contact meter allows a quick and easy measurement of water levels. Used in wells, tanks, drilling holes and to control pumping tests.

- Available with visual and acoustic signal
- Plummet Ø 15 mm or Ø 12 mm
- Solid construction



Art.-No	€/piece	Cable length (m)	Plummet Ø (mm)
Electric contact meter			
<b>28.920</b>	362,40	<b>15</b>	<b>12</b>
<b>28.930</b>	384,00	<b>30</b>	<b>12</b>
<b>28.912</b>	340,70	<b>15</b>	<b>15</b>
<b>28.913</b>	362,40	<b>30</b>	<b>15</b>

## HDPE filter tubes

Slot width is ca. 0,3 mm.

Art.-No	€/piece	Description
TR thread		
28.650	22,50	Filter tube TR Ø 32x1000 mm, ID 1"
28.670	23,50	Filter tube TR Ø 40x1000 mm, ID 1 1/4"
28.680	26,50	Filter tube TR Ø 50x1000 mm, ID 1 1/2"
28.690	30,10	Filter tube TR Ø 63x1000 mm, ID 2"



## HDPE attachment tubes

Without slots.

Art.-No	€/piece	Description
TR thread		
28.653	16,80	Attachment tube TR Ø 32x1000 mm, ID 1"
28.673	17,90	Attachment tube TR Ø 40x1000 mm, ID 1 1/4"
28.683	18,90	Attachment tube TR Ø 50x1000 mm, ID 1 1/2"
28.693	23,00	Attachment tube TR Ø 63x1000 mm, ID 2"



## HDPE cone with external thread

For closing gauge tubes.

Art.-No	€/piece	Description
TR thread		
28.656	13,40	Cone external thread TR 32
28.676	13,70	Cone external thread TR 40
28.686	14,80	Cone external thread TR 50
28.696	16,40	Cone external thread TR 63

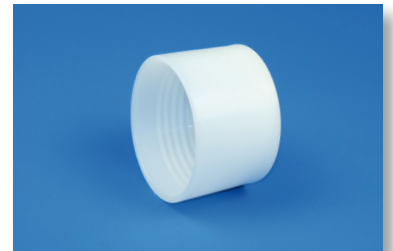


Cone TR

## HDPE caps with internal thread

For closing gauge tubes.

Art.-No	€/piece	Description
28.657	11,20	Cap internal thread TR 32
28.677	11,70	Cap internal thread TR 40
28.687	12,20	Cap internal thread TR 50
28.697	14,00	Cap internal thread TR 63



## Plug cap with lid

To plug on top of gauge tubes.

Art.-No	€/piece	Description
29.235	4,80	Plug cap with lid for tube Ø 32 mm
29.236	5,50	Plug cap with lid for tube Ø 40 mm
29.237	5,90	Plug cap with lid for tube Ø 50 mm
29.238	6,30	Plug cap with lid for tube Ø 63 mm



## Plugs

For closing gauge tubes. The plug is simply inserted into the gauge tube. Using a hex wrench, the plug is clamped in the gauge tube by the clamp system. No connection thread is required on the tube.

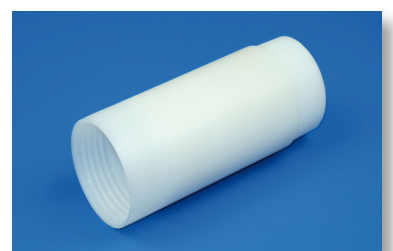
Art.-No	€/piece	Description
28.640	12,90	Plug for tube Ø 32 mm
28.641	13,80	Plug for tube Ø 40 mm
28.642	15,80	Plug for tube Ø 50 mm
28.643	18,40	Plug for tube Ø 63 mm



## Adapter TR - inch thread

For connecting trapezoidal thread with inch thread.

Art.-No	€/piece	Description
28.660	12,90	Adapter internal TR 32 - external R 1"
28.661	13,40	Adapter internal TR 40 - external R 1 1/4"
28.663	14,20	Adapter internal TR 50 - external R 1 1/2"
28.662	16,80	Adapter internal TR 63 - external R 2"



## Closure cap

Used for groundwater observation gauges.  
Connection: internal thread.

Art.-No	€/piece	Description
TR thread		
28.540	36,60	Lockable cap G 1 1/4"
28.541	36,60	Lockable cap G 1 1/2"
28.542	36,60	Lockable cap G 2"
Inch thread		
28.543	2,30	PE screwable cap G 1 1/4"
28.544	2,50	PE screwable cap G 1 1/2"
28.545	2,80	PE screwable cap G 2"



Lockable cap



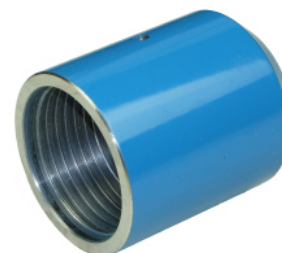
Screwable cap

## Striking head

To drive in HDPE filter and attachment tubes, also for driving in steel ram filters and steel attachment tubes.

Connection: internal thread x internal thread.

Art.-No	€/piece	Description
TR thread		
07.125	56,30	Striking head TR 32 - M20
07.126	58,80	Striking head TR 40 - M20
07.128	61,40	Striking head TR 63 - M20
Inch thread		
07.130	56,30	Striking head TR 32 - M22
07.131	58,80	Striking head TR 40 - M22
07.133	61,40	Striking head TR 63 - M22
Accessories		
03.011	8,30	Threaded nipple M20x70 mm - AF 13
03.013	10,80	Threaded nipple M22x70 mm - AF 15
04.019	13,50	Hook spanner 40-42 mm (TR 32)
04.011	15,60	Hook spanner 45-50 mm (TR 40)
04.017	21,10	Hook spanner 58-62 mm (TR 50 / G 1 1/4" / G 1 1/2")
04.020	22,20	Hook spanner 68-75 mm (TR 63 / G 2")



## § 1 Allgemeines, Geltungsbereich

- (1) Diese Allgemeinen Geschäftsbedingungen (nachfolgend: AGB) gelten für alle Geschäftsbeziehungen mit unseren Kunden (nachfolgend: Käufer). Die AGB gelten nur, wenn der Käufer Unternehmer im Sinne des § 14 BGB, eine juristische Person des öffentlichen Rechts oder ein öffentlich-rechtliches Sondervermögen ist.
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## § 2 Vertragsschluss

- (1) Unsere Angebote sind freibleibend und unverbindlich. Dies gilt auch, wenn wir dem Käufer Kataloge, Prospekte, Zeichnungen, Preislisten, Produktbeschreibungen o.ä. Unterlagen überlassen haben. Wir behalten uns die Weiterentwicklung unserer Produkte vor.
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- (3) Die Annahme kann durch uns in Textform oder durch Lieferung der Ware an den Käufer erklärt werden.
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## § 3 Lieferzeit und Lieferverzug

- (1) Angegebene Lieferfristen und -termine sind unverbindlich, es sei denn, die Verbindlichkeit wurde ausdrücklich vereinbart und schriftlich bestätigt. Maßgeblich für den Termin ist unsere schriftliche Bestätigung. Die Einhaltung von Fristen und Terminen setzt die abschließende Klärung aller kaufmännischen und technischen Fragen voraus sowie die rechtzeitige und ordnungsgemäße Erfüllung aller Mitwirkungspflichten des Käufers.
- (2) Sofern wir verbindliche Lieferfristen aus Hindernissen, die wir nicht zu vertreten haben, nicht einhalten können, verlängern sich vereinbarte Lieferfristen um die Dauer des Hindernisses. Dies gilt insbesondere auch für den Fall einer nicht rechtzeitigen Belieferung durch unseren Zulieferer, wenn wir ein kongruentes Deckungsgeschäft abgeschlossen haben. Bei Eintritt eines Hindernisses informieren wir den Käufer unverzüglich und teilen zugleich die voraussichtliche, neue Lieferfrist mit. Ist die Leistung auch innerhalb der neuen Lieferfrist nicht verfügbar, sind wir berechtigt, ganz oder teilweise vom Vertrag zurückzutreten. Eine bereits erbrachte Gegenleistung des Käufers erstatten wir unverzüglich.
- (3) Alle Liefertermine verstehen sich ab Werk. Dies gilt auch für den Fall, dass wir die Versendung der Ware an den Kunden übernommen haben.
- (4) Der Eintritt unseres Lieferverzugs bestimmt sich nach den gesetzlichen Vorschriften. In jedem Fall ist für den Eintritt des Verzugs eine Mahnung durch den Käufer erforderlich. Im Falle des Verzugs kann der Käufer einen pauschalierten Verzugschadensersatz verlangen. Dieser beträgt für jede vollendete Kalenderwoche des Verzugs 0,5% des Nettopreises (Lieferwert), insgesamt jedoch höchstens 5% des Lieferwerts der verspätet gelieferten Ware. Uns bleibt der Nachweis vorbehalten, dass dem Käufer ein geringerer Schaden als vorstehende Pauschale entstanden ist.

- (5) Die Rechte des Käufers gemäß § 8 dieser AGB und unsere gesetzlichen Rechte, insbesondere bei einem Ausschluss der Leistungspflicht, bleiben unberührt.

## § 4 Erfüllungsort, Verpackung, Versand, Gefahrübergang

- (1) Die Lieferung erfolgt ab Lager, wo auch der Erfüllungsort ist. Auf Verlangen und Kosten des Käufers versenden wir die Ware an einen anderen Bestimmungsort (Versendungskauf). Soweit nicht etwas anderes vereinbart ist, bestimmen wir die Art und Weise der Verpackung und des Versandes. Wir sind zur Teillieferung in zumutbarem Umfang berechtigt.
- (2) Die Gefahr des zufälligen Untergangs und der zufälligen Verschlechterung der Ware geht spätestens mit der Übergabe auf den Käufer über. Beim Versendungskauf gehen die Gefahr des zufälligen Untergangs, der zufälligen Verschlechterung der Ware und die Verzögerungsgefahr bereits mit Auslieferung der Ware an den Spediteur, den Frachtführer oder der sonst zur Ausführung der Versendung bestimmten Person oder Anstalt über.

## § 5 Preise und Zahlung

- (1) Unsere Preise verstehen sich zuzüglich der jeweils gültigen gesetzlichen Umsatzsteuer. Eventuell anfallende Kosten ab Lager für Verpackung, Fracht und Versicherung sowie Gebühren, Steuern oder sonstige Abgaben trägt der Käufer. Sofern im Einzelfall nichts anderes vereinbart ist, gelten unsere jeweils zum Zeitpunkt des Vertragsschlusses aktuellen Preise.
- (2) Transport- und alle sonstigen Verpackungen nach Maßgabe der Verpackungsverordnung nehmen wir nicht zurück, sie werden Eigentum des Käufers.
- (3) Die in unseren Rechnungen ausgewiesenen Forderungen sind ab Rechnungsstellung und Gefahrübergang (§ 4 Abs. 2) fällig und zahlbar binnen 14 Tagen. Teillieferungen können gesondert in Rechnung gestellt werden. Die Hereingabe von Wechseln oder Schecks bedarf unserer Zustimmung.
- (4) Mit Ablauf von 14 Tagen ab Rechnungsstellung und Gefahrübergang kommt der Käufer in Verzug. Der Kaufpreis ist während des Verzugs zum jeweils geltenden gesetzlichen Verzugszinssatz zu verzinsen. Wir behalten uns die Geltendmachung eines weitergehenden Verzugschadens vor.
- (5) Dem Käufer stehen Aufrechnungs- oder Zurückbehaltungsrechte nur insoweit zu, als sein Anspruch rechtskräftig festgestellt oder unbestritten ist. Bei Mängeln der Lieferung bleiben die Rechte des Käufers unberührt.
- (6) Wird nach Vertragsschluss erkennbar, dass unser Anspruch auf den Kaufpreis durch mangelnde Leistungsfähigkeit des Käufers gefährdet ist oder befindet sich der Käufer in Zahlungsverzug, sind wir nach den gesetzlichen Vorschriften zur Leistungsverweigerung und gegebenenfalls nach Fristsetzung zum Rücktritt vom Vertrag berechtigt (§ 321 BGB). Bei Verträgen über die Herstellung unvertretbarer Sachen (Einzelanfertigungen) können wir den Rücktritt sofort erklären; die gesetzlichen Regelungen über die Entbehrlichkeit der Fristsetzung bleiben unberührt.

## § 6 Eigentumsvorbehalt

- (1) Wir behalten uns das Eigentum an gelieferter Ware bis zur vollständigen Bezahlung aller unserer gegenwärtigen und künftigen Forderungen aus dem Kaufvertrag und der laufenden Geschäftsbeziehung mit dem Käufer (gesicherte Forderungen) vor. Der Käufer darf unter Eigentumsvorbehalt stehende Ware weder an Dritte verpfänden, noch zur Sicherheit übereignen. Der Käufer hat uns unverzüglich zu benachrichtigen, wenn und soweit Zugriffe Dritter erfolgen.
- (2) Bei vertragswidrigem Verhalten des Käufers, insbesondere bei Zahlungsverzug, sind wir berechtigt, nach den gesetzlichen Vorschriften vom Vertrag zurückzutreten und/oder Ware auf Grund des Eigentumsvorbehalts herauszuverlangen. Das Herausgabeverlangen beinhaltet nicht zugleich die Erklärung des Rücktritts; wir sind vielmehr berechtigt, lediglich die Ware herauszuverlangen und uns den Rücktritt vorzubehalten. Zahlt der Käufer den fälligen Kaufpreis nicht, dürfen wir diese Rechte nur geltend machen, wenn wir dem Käufer zuvor erfolglos eine angemessene Frist zur Zahlung gesetzt haben oder eine derartige Fristsetzung nach den gesetzlichen Vorschriften entbehrlich ist.

(3) Der Käufer ist befugt, die unter Eigentumsvorbehalt stehenden Waren im ordnungsgemäßen Geschäftsgang weiter zu veräußern und/oder zu verarbeiten. In diesem Fall gelten ergänzend die nachfolgenden Bestimmungen.

(a) Der Eigentumsvorbehalt erstreckt sich auf die durch Verarbeitung, Vermischung oder Verbindung unserer Waren entstehenden Erzeugnisse zu deren vollem Wert, wobei wir als Hersteller gelten. Bleibt bei einer Verarbeitung, Vermischung oder Verbindung mit Waren Dritter deren Eigentumsrecht bestehen, so erwerben wir Miteigentum im Verhältnis der Rechnungswerte der verarbeiteten, vermischten oder verbundenen Waren. Im Übrigen gilt für das entstehende Erzeugnis das Gleiche wie für die unter Eigentumsvorbehalt gelieferte Ware.

(b) Die aus dem Weiterverkauf der Ware oder des Erzeugnisses entstehenden Forderungen gegen Dritte tritt der Käufer schon jetzt insgesamt bzw. in Höhe unseres etwaigen Miteigentumsanteils gemäß vorstehendem Absatz zur Sicherheit an uns ab. Wir nehmen die Abtretung an.

(c) Zur Einziehung der Forderung bleibt der Käufer neben uns ermächtigt. Wir verpflichten uns, die Forderung nicht einzuziehen, solange der Käufer seinen Zahlungsverpflichtungen uns gegenüber nachkommt, nicht in Zahlungsverzug gerät, kein Antrag auf Eröffnung eines Insolvenzverfahrens gestellt ist und kein sonstiger Mangel seiner Leistungsfähigkeit vorliegt. Ist dies aber der Fall, können wir verlangen, dass der Käufer uns die abgetretenen Forderungen und deren Schuldner bekannt gibt, alle zum Einzug erforderlichen Angaben macht, die dazugehörigen Unterlagen aushändigt und den Schuldner (Dritten) die Abtretung mitteilt.

(d) Übersteigt der realisierbare Wert der Sicherheiten unsere Forderungen um mehr als 10%, werden wir auf Verlangen des Käufers Sicherheiten nach unserer Wahl freigeben.

### § 7 Gewährleistung

(1) Für die Rechte des Käufers bei Sach- und Rechtsmängeln gelten die gesetzlichen Vorschriften, soweit im Nachfolgenden nichts anderes bestimmt ist. In allen Fällen unberührt bleiben die gesetzlichen Sondervorschriften bei Endlieferung der Ware an einen Verbraucher (Lieferantenregress gem. §§ 478, 479 BGB).

(2) Grundlage unserer Mängelhaftung ist die über die Beschaffenheit der Ware getroffene Vereinbarung. Für öffentliche Äußerungen Dritter übernehmen wir keine Haftung.

(3) Soweit sie nicht auf unser Verschulden zurückzuführen sind, haften wir nicht für Schäden, aufgrund ungeeigneter oder unsachgemäßer Verwendung, fehlerhafte Montage bzw. Inbetriebnahme sowie fehlerhafte oder nachlässige Behandlung durch den Käufer oder Dritte. Gleiches gilt für Schäden aufgrund von natürlicher Abnutzung, ungeeigneten Betriebsmitteln, Austauschwerkstoffen, mangelhaften Bauarbeiten, ungeeignetem Baugrund, Witterungseinflüssen sowie von chemischen, elektrochemischen oder elektrischen Einflüssen.

(4) Die Mängelansprüche des Käufers setzen voraus, dass er seinen gesetzlichen Untersuchungs- und Rügepflichten (§§ 377, 381 HGB) nachgekommen ist. Zeigt sich bei der Untersuchung oder später ein Mangel, so ist uns hiervon unverzüglich, spätestens binnen 10 Tagen, Anzeige zu machen. Es genügt die rechtzeitige Absendung der Anzeige. Versäumt der Käufer die ordnungsgemäße Untersuchung und/oder Mängelanzeige, ist unsere Haftung für den nicht angezeigten Mangel ausgeschlossen.

(5) Ist die gelieferte Sache mangelhaft, können wir wählen, ob wir Nacherfüllung durch Beseitigung des Mangels (Nachbesserung) oder durch Lieferung einer mangelfreien Sache (Ersatzlieferung) leisten. Unser Recht, die Nacherfüllung unter den gesetzlichen Voraussetzungen zu verweigern, bleibt unberührt.

(6) Wir sind berechtigt, die geschuldete Nacherfüllung davon abhängig zu machen, dass der Käufer den fälligen Kaufpreis bezahlt. Der Käufer ist jedoch berechtigt, einen im Verhältnis zum Mangel angemessenen Teil des Kaufpreises zurückzubehalten.

(7) Stellt sich das Mangelbeseitigungsverlangen des Käufers als unberechtigt heraus, können wir die hieraus entstandenen Kosten vom Käufer ersetzt verlangen.

(8) Wenn die Nacherfüllung fehlgeschlagen oder eine für sie vom Käufer gesetzte angemessene Frist erfolglos abgelaufen oder nach den gesetzlichen Vorschriften entbehrlich ist, kann der Käufer vom Kaufvertrag zurücktreten oder den Kaufpreis mindern. Bei einem unerheblichen Mangel besteht kein Recht zum Rücktritt.

(9) Ansprüche des Käufers auf Schadensersatz bzw. Ersatz vergeblicher Aufwendungen bestehen nur nach Maßgabe des folgenden § 8 der AGB. Im Übrigen sind sie ausgeschlossen.

### § 8 Sonstige Haftung

(1) Soweit sich aus diesen AGB nichts anderes ergibt, haften wir bei einer Verletzung von vertraglichen und außervertraglichen Pflichten nach den einschlägigen gesetzlichen Vorschriften.

(2) Wir haften für Schadensersatz, gleich aus welchem Rechtsgrund, bei Vorsatz und grober Fahrlässigkeit. Im Falle einfacher Fahrlässigkeit haften wir nur

a) für Schäden aus der Verletzung des Lebens, des Körpers oder der Gesundheit;

b) für Schäden aus der Verletzung einer wesentlichen Vertragspflicht, d.h. einer solchen, deren Erfüllung die ordnungsgemäße Durchführung des Vertrages überhaupt erst ermöglicht und auf deren Einhaltung der Käufer regelmäßig vertraut und vertrauen darf, wobei unsere Haftung jedoch auf den Ersatz des vorhersehbaren, typischerweise eintretenden Schadens begrenzt ist;

(3) Die vorstehenden (§ 8 Abs. 2) Haftungsbeschränkungen gelten nicht, soweit wir einen Mangel arglistig verschwiegen oder eine Garantie für die Beschaffenheit der Ware übernommen haben. Das Gleiche gilt für Ansprüche des Käufers nach dem Produkthaftungsgesetz.

(4) Wegen einer Pflichtverletzung, die nicht in einem Mangel besteht, kann der Käufer nur zurücktreten, wenn wir die Pflichtverletzung zu vertreten haben. Ein freies Kündigungsrecht des Käufers (insbesondere gem. §§ 651, 649 BGB) wird ausgeschlossen. Im Übrigen gelten die gesetzlichen Voraussetzungen und Rechtsfolgen.

### § 9 Verjährung

(1) Abweichend von § 438 Abs. 1 Nr. 3 BGB beträgt die allgemeine Verjährungsfrist für Ansprüche aus Sach- und Rechtsmängeln ein Jahr ab Lieferung.

(2) Die Verjährungsfrist für vertragliche und außervertragliche Schadensersatzansprüche des Käufers, die auf einem Mangel der Ware beruhen, beträgt ebenfalls ein Jahr, es sei denn die Anwendung der regelmäßigen gesetzlichen Verjährung (§§ 195, 199 BGB) würde im Einzelfall zu einer kürzeren Verjährung führen. Die Verjährungsfristen des Produkthaftungsgesetzes bleiben in jedem Fall unberührt.

(3) Im Übrigen gelten die gesetzlichen Verjährungsfristen.

### § 10 Rechtswahl und Gerichtsstand

(1) Erfüllungsort für alle sich aus dem Vertrag und der Geschäftsbeziehung mit dem Käufer ergebenden wechselseitigen oder einseitigen Verbindlichkeiten ist unser Firmensitz in Gehrden.

(2) Für diese AGB und alle Rechtsbeziehungen zwischen uns und dem Käufer gilt das Recht der Bundesrepublik Deutschland unter Ausschluss internationalen Einheitsrechts, insbesondere des UN-Kaufrechts.

(3) Gerichtsstand für alle sich aus dem Vertragsverhältnis oder der Geschäftsbeziehung ergebenden Streitigkeiten ist Hannover. Wir sind berechtigt, den Käufer an seinem allgemeinen Gerichtsstand zu verklagen.